

AN EXAMINATION OF THE DIFFERENCES IN DOCTORAL STUDENTS' LEVELS OF
LIFE STRESS, BURNOUT, AND RESILIENCE BY PROGRAM PHASE

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ABSTRACT

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The purpose of this study was to determine the extent of differences among life stressors, burnout, and resilience for educational leadership doctoral students based on program phase. This study was intended to provide information to assist students who are in various phases (first, second, and third phases) of their doctoral program. There is a dearth in academic literature about the combined concepts of doctoral students, life stressors, burnout, and resilience. Life stressors, burnout, and resilience have been examined within the literature with some frequency; however, doctoral student burnout has not been examined, specifically in relation to differences in levels of life stressors, levels of burnout, and levels of resilience. Doctoral education is rife with academic stress (Ali & Kohun, 2006; Jones, 2013; Lovitts, 2005), financial pressures (Callender & Jackson, 2005; Ehrenberg et al., 2007; Hira et al., 2000), social challenges (Ali & Kohn, 2006; Lovitts, 2001; Ross, Niebling, & Heckert, 1999), and family obligations (Boes, Ullery, & Cobia, 1999; Lipschutz, 1993; Lovitts, 2001; Middleton, 2001; Smith, Maroney, Nelson, Abel, & Abel, 2006). Doctoral students are prime candidates for experiencing life stressors and burnout

Participants for this study were comprised of EdD doctoral students studying educational leadership with an emphasis in either higher educational leadership and/or K-12 leadership at a university in Southeast Texas.

The findings indicated that a majority of students in this study had low levels of the negative components of experienced life stress, and the two negative components of

burnout through exhaustion and cynicism. When examining positive innate qualities of professional efficacy and resilience, the largest percentage of students in this study have a medium level of previously stated positive aspects.

KEY WORDS: Life stress, Burnout, Resilience, Doctoral students

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CHAPTER I

Introduction

Life can be difficult and people often encounter stressful life events. Some of these stressful life events can be divorce, the birth of a child, the death of a family member, the loss of one's job, and health issues (Holmes & Rahe, 1967). People can often react to these stressful situations with feelings of uncertainty about the future. If this stress persists long enough and with enough strain, a person can experience *burnout*. Golembiewski and Munzenrider (1988) indicated that burnout is an assemblage of different stressors with the ability to cause such extensive strain that an individual's coping skills will not suffice. A mitigating factor that may assist in preventing burnout is resilience. Resilience is a process wherein a person adapts to the situation in spite of adversities; resilience is simply "bouncing back" (Smith et al., 2008, p. 194). Resilience is not congenital; rather, it is a collection of learned behaviors, thoughts, and actions (Egeland, Carlson, & Sroufe, 1993).

Background of the Study

Stress and the endurance of life's dilemmas can have a negative effect on an individual's mental and/or physical health. When Rahe, Meyer, Smith, Kjaer, and Holmes (1964) investigated stress and stressful life events, they discovered that stress caused mental anguish and could have an overall negative effect on one's physical health. Unfortunately, stress can be difficult to measure and define. For example, Hinkle (1961) believed that emotional stress could not be measured in the same way as stress placed on a metal beam. Rahe and Holmes (1966) attempted to generate a tool that could retrospectively measure quantity of stress experienced by individuals. Rahe and Holmes

were the seminal researchers who investigated life events and stress experienced by an individual (Rahe & Holmes, 1966; Rahe et al., 1964; Rahe, McKean, & Arthur, 1967). Their investigations into stressful life events led to development of the Social Readjustment Rating Scale (SRRS), which was created in 1967. The SRRS consists of 43 stressful life events, rated in terms of readjustment required for an average person.

After numerous studies using SRRS, researchers have determined that there are three causes of stress: perception of control at time of the stressful life event, recency of the stressful event's occurrence, and financial resources available to the individual (McGrath & Burkhart, 1983). In this way, the extent of stress is related to the length of time an individual needed to become accustomed to changes experienced in daily routines (Mechanic, 1975).

Following the same school of thought, researchers have examined life events to determine a measurable range for feelings of distress (Chan, Chan-Ho, & Chan, 1984; Paykel, Prusoff, & Uhlenhuth, 1971; Sarason, Johnson, & Siegel, 1978). Some scholars (Gerst, Grant, Yager, & Sweetwood, 1978; Lewinsohn, Mermelstein, Alexander, & MacPhillamy, 1985) believed that stress caused by life events was due to a person's inability to separate negative thoughts and feelings from the fear of probable changes. Stress is frequently thought of as a way in which people need to socially readjust after the occurrence of a major life event (Cheng, Lau, & Chan, 2014). Culmination of coping with extremes in major life events and lack of recovery time could lead to stress experiences or trouble with social adjustment.

Maslach, Schaufeli, and Leiter (2001) investigated burnout in the workplace; their research indicated that burnout can occur when people become wholly invested in work

and do not receive adequate intrinsic and extrinsic rewards. Burnout is a phenomenon that has been researched since the 1970s (Armstrong, 1979; Freudenberg, 1974, 1975; Hendrickson, 1979; Lamb, 1979; Maslach, 1976, 1978a, 1978b; Maslach & Jackson, 1978, 1979; Maslach & Pines, 1977; McGuire, 1979; Patrick, 1979; Pines & Maslach, 1978; Shubin, Milnazic, & Jennings, 1978; Veninga, 1979). Burnout was originally conceived within the helping professions (Maslach, 1978; Maslach & Jackson, 1981; Schaufeli, Leiter, Maslach, & Jackson, 1996), so a preponderance of the studies that have been conducted investigate members of the helping professions (Maslach & Schaufeli, 1993; Michie & Williams, 2003). Recently, researchers have acknowledged that burnout can also occur outside of the helping professions; studies have expanded to include students (Bakker, Demerouti, & Schaufeli, 2002; Schaufeli et al., 1996).

Burnout is a condition that develops when a person believes that he or she does not have the necessary resources to effectively deal with real or perceived stressors (i.e., personal and environmental) encountered over a prolonged period of time (Maslach, Jackson, & Leiter, 1996). As the level of burnout increases, an individual could trigger a host of negative outcomes. Maslach et al. (1996) theorized that burnout occurs on several different levels, showing how burnout affects the individual and those who surround him or her. The first level is at the individual level; a person suffering from burnout might exhibit both physical and mental symptoms. The next level occurs at the organizational level; an organization can be affected by an increased amount of employee absences, employee turnover, or a lack of employee organizational commitment. The final level is at the service level. This level is particularly important for people working in a helping

profession, because a person suffering from burnout may not provide a high quality of care to his or her patient (Maslach et al., 1996).

There are a variety of difficult life events that are capable of changing individuals' lives. Examples include the death of a person special to them, being fired or laid off, and becoming ill with a serious malady (Boerner & Jopp, 2010; Bonanno, 2004; Maddi, 2005; Richardson, 2002; Walsh, 2002). Many people react to strenuous circumstances by expressing strong emotions, and progressing with a sense of uncertainty; yet, people generally acclimatize, over time (Bonanno, 2004). Sometimes people adjust because of resilience, the process of adapting well in the face of adversity. Examples of adversity include trauma, tragedy, threat, or major "sources of stress: family and relationship problems, serious health problems, or workplace and financial stressors" (Windle, 2010, p. 156). According to White, Driver, and Warren (2008), resilience is a trait that involves "behaviors, thoughts, and actions that can be learned overtime" (p. 9).

Many combinations of factors contribute to resilience. Several studies show that the main factor that contributes to resilience is the presence of caring and supportive relationships within and outside the family (Benard, 1995; Bonanno, 2004; Crosnoe & Elder, 2004). Established healthy, paradigmatic relationships can create love, trust, and encouragement, all of which offer reassurance to help bolster a person's resilience (Bonanno, 2004). Several additional factors are associated with resilience: (a) making realistic plans and to taking steps to carry them out (Everall, Altrows, & Paulson, 2006; Skodol, 2010), (b) developing a positive view of oneself and confidence in strengths and abilities (Dumont & Provost, 1999; Ong, Bergeman, & Chow, 2010; Rutter, 1987; Skodol, 2010), (c) exhibiting skills in communication and problem solving (Fergus &

Zimmerman, 2005; Pattalierson, 2002; Skodol, 2010; Werner, 1995), (d) possessing the capacity to regulate strong feelings and impulses (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984; Skodol, 2010), and (e) increasing resistance to later stressful events (Rutter, 1981; Skodol, 2010).

Researchers (Neumann, Finlay-Neumann, & Reichel, 1990; Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002) have started to investigate burnout in college students; college burnout was a condition previously thought of as immaterial. Several researchers have recently accumulated influential data on student burnout (e.g., Mostert, Pinaar, Gauche, & Jackson, 2007; Pienaar & Sieberhagen, 2005; Schaufeli et al., 2002).

Statement of the Problem

College can be a stressful time in a person's life (Bland, Melton, Welle, Bigham, 2012; Council of Graduate Studies, 2013; Spaulding & Rockinson-Szapkiw, 2012). Additionally, enrollment into a graduate program elicits a marked period of heightened levels of life change (Goplerud, 1980). When Halleck (1976) investigated the frequency of college students' use of mental health services, he noted that graduate students were the second most frequent group to use mental health services. When demands of a doctoral program are added to the stresses of adult life, the measurable quantity of stress graduate students experienced often increased (Saunders & Balinsky, 1993). Researchers have examined possible additional stressors; they noted that doctoral programs are expensive (Callender & Jackson, 2005; Ehrenberg, Jakubson, Green, So, & Price, 2007; Hira, Anderson, & Petersen, 2000), and programs can be time consuming (Bérubé, 2013).

Within the doctoral program, students may experience stress generated from writing and researching (Ali & Kohun, 2006; Jones, 2013). Multiple researchers (e.g., Ali

& Kohun, 2006; Delamont, Atkinson, & Parry, 1997; Jones, 2013) have listed isolation as a major stressor of doctoral students. Feelings of isolation can sometimes lead doctoral students to mistakenly believe they are lonely or alienated (Jones, 2013; Middleton, 2001). In contrast, another potential stressor is the role of social connections; social interactions can either be a stress reliever or an avenue for added stress (Gardner, 2010).

Resilience is a critical skill for doctoral students to possess to counter the effects of various extremes in social stressors (Roberts & Plakhotnik, 2009). Morales (2008) contends that academic resilience, which is the capacity to thrive in an educational program, can assist students in their exposure to risk factors. Research about resiliency indicates that successful students have access to important resources such as family and the school environment (McNair & Johnson, 2009). In their study, McNair and Johnson (2009) posited that the family had a direct influence on the development of how a student views the importance of school and performing well academically. Further, McNair and Johnson (2009) stated that school environment played an important role in the socialization of how a student viewed the importance of academic success. A student who has positive interactions with instructors and peers will develop higher levels of motivation as opposed to students who have negative instructor interactions (McNair & Johnson, 2009). Additionally, resilient students often have an effectual mentor (Hassinger & Plourde, 2005; Zalaquett & Feliciano, 2004). Students who demonstrate resilience have social skills, positive self-efficacy, a positive outlook for the future, support from both inside and outside of the academic program, and a high level of academic performance in their programs (Castro, Garcia, Cavazos, & Castro, 2011).

Despite a large number of researchers who have examined life stressors, burnout, and resiliency among professionals and students, there are few, peer-reviewed articles analyzing all three constructs (i.e., life stressors, burnout, and resiliency) among doctoral students pursuing a degree in educational leadership. This study contributes vital information to literature on doctoral student life stressors, burnout, and resilience and aims to provide college administrators information to help with the support and retention of doctoral students.

Purpose of the Study

There is a dearth in academic literature about the combined concepts of doctoral students, life stressors, burnout, and resilience. Life stressors, burnout, and resilience have been examined within the literature with some frequency; however, doctoral student burnout has not been examined, specifically in relation to differences in levels of life stressors, levels of burnout, and levels of resilience. Doctoral education is rife with academic stress (Ali & Kohun, 2006; Jones, 2013; Lovitts, 2005), financial pressures (Callender & Jackson, 2005; Ehrenberg et al., 2007; Hira et al., 2000), social challenges (Ali & Kohn, 2006; Lovitts, 2001; Ross, Niebling, & Heckert, 1999), and family obligations (Boes, Ullery, & Cobia, 1999; Lipschutz, 1993; Lovitts, 2001; Middleton, 2001; Smith, Maroney, Nelson, Abel, & Abel, 2006). Doctoral students are prime candidates for experiencing life stressors and burnout. The purpose of this study was to determine the extent of differences among life stressors, burnout, and resilience for educational leadership doctoral students based on program phase. This study was intended to provide information to assist students who are in various phases (first, second, and third phases) of their doctoral program.

Educational Significance of the Study

The findings from this study were intended to assist doctoral students who might be suffering from burnout and stress. Additionally, faculty and administrators could derive information concerning the program phase in the doctoral program when doctoral students typically experience an increased level of burnout. With information on average peak burnout times, faculty and administrators could develop an intervention program for at-risk doctoral students. Findings from this study provides doctoral students' families, friends, and coworkers with information that could help in supporting a loved one. Moreover, this study provides administrators of educational leadership programs information about the most frequent methods of resilience utilized by doctoral students. Knowledge concerning resilience may lead to an intervention program that will help future doctoral students.

Research Questions

The following research questions were examined:

1. To what extent are there differences in the level of life stress by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
2. To what extent are there differences in the level of burnout by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
3. To what extent are there differences in the level of resilience by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

Theoretical Framework

Stress has long been an interest of psychologists and is potentially the most investigated concept in the field of psychology (Hobfoll, 1998). Hobfoll (1989, 1998) added to the study of stress by developing a theoretical model, known as the conservation of resources theory (COR). The COR theory postulates that when an individual loses a resource or believes that a loss of resource is imminent stress will occur (Hobfoll, 1989, 1998). The main tenant of COR theory concerns resources. Hobfoll (1989) defines resources as “those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of those objects, personal characteristics, conditions, or energies” (p. 516). Hobfoll (1989) also contends that resources “have instrumental value to people, and second, they have symbolic value in that they help to define for people who they are” (p. 517).

There are four kinds of resources defined in the COR theory. The first resource is object resources. Object resources are prized when the acquisition of the object(s) will enhance a person’s status based on an object’s “rarity and expense” (Hobfoll, 1998, p. 517). Hobfoll (1989) contends that a home has inherent value for providing shelter, as opposed to a mansion, which indicates one’s socioeconomic status. Dohrenwend (1978) contended that having a higher socioeconomic status is an important factor in enhancing one’s stress resistance.

The second resource consists of situational conditions. Conditions are things that are valued and sought by an individual, an example of a condition is marriage. Research has indicated that people who are married have lower levels of stress and higher levels of stress resistance (Thoits, 2010). Personal characteristics are the third resource of stress

resistance. Personal characteristics influence how an individual views the world. Hobfoll (1989) contends that when an individual who has a lessened risk of stress views the world as a predictable place, generally the challenges faced turn out for his or her best interest. Researchers have long believed that a person's outlook on life is a critical component to being stress-resistant (Antonovsky, 1979; Cohen & Edwards, 1989; Hobfoll, 1985). Taking personal characteristics a step further leads to the final resource of energies, which consist of "time, money, and knowledge" (Hobfoll, 1989, p. 517). Hobfoll (1989) argued that these resources have no intrinsic value but are valued because they allow the person to acquire other resources.

The COR theory is centered on the utilization of resources and/or the loss of resources. Hobfoll (1998) posited that stress happens when resources are lost, there is a threat of loss, or the individual does not get resources "following significant resource investment" (p. 55). A primary COR principle postulates that loss is fundamental and more important to an individual than the ability to gather resources. Gaining resources is a secondary principle in COR theory.

The COR theory provides a framework for the current investigation of doctoral students and their levels of life stress, burnout, and resilience by program phase. The COR theory as related to students postulates that students are confronted with a threat of loss or a loss of the previously mentioned resources in three different ways. First, resources are threatened, producing stress; an example of threatened resources is when a student loses self-esteem because of a poor grade on an assignment (Alarcon, Edwards, & Menke, 2011). The second COR perspective occurs when a resource is actually lost. An example of resource loss is a lack of time to finish an assignment because of family or

work obligations; this loss of a resource can produce stress (Alarcon et al., 2011). The last example of a loss involves resource investment and receiving a return on the investment. When a student studies for an exam, but his or her exam score does not reflect the energy invested, this investment of resources has a net loss, which might increase his or her stress (Alarcon et al., 2011).

COR theory applies to burnout as well. Burnout within the COR theory is the loss of resources over a prolonged period of time (Hobfoll & Freedy, 1993). The resources that a student might lose include health, time, and self-esteem (Alarcon et al., 2011). Losses in resources often lead to poor coping strategies, which amplify further losses (Alarcon et al., 2011). Prolonged loss of resources can lead to burnout.

In contrast to burnout, a student who has a high level of resilience and utilizes positive coping strategies may create an abundance of resources. Investment can turn these additional resources into revenue in the form of social support. An abundance of resources can result in healthy coping strategies. Additionally, an abundance of resources can create vigor. Vigor can be thought of as an increase in resilience and persistence (Schaufeli & Bakker, 2004). In conclusion, the COR theory can help one understand how people respond to stress, burnout, and the potentially beneficial attributes of resilience (Hobfoll, 2011).

Definition of Terms

In an attempt to provide an operational base of understanding, the following terms were used in this study. These terms are defined related to their impact on mental health.

Burnout. Burnout is a condition of emotional, mental, and physical exhaustion caused by a loss of resources over a prolonged period of time (Alarcon et al., 2011). This

stress can manifest itself into feelings of disillusionment, helplessness, and feeling worn out. Someone who is dealing with the feelings of burnout often believes that his or her problems are too difficult to overcome (Maslach & Jackson, 1981). This feeling of an insurmountable problem presents itself with a lack of energy to care, and further, the person often does not have the energy to do something to rectify the situation (Maslach & Schaufeli, 1993). Additionally, a person who is burned out experiences unhappiness and detaches themselves from the problem. This detachment can threaten their job, family, and health (Maslach & Goldberg, 1998).

Resilience. For this study, resilience is defined as the ability of an individual to cope effectively through the use of positive coping strategies with major life change and/or adversity (Lee & Cranford, 2008).

Stress. Stress is a feeling that people experience when they believe they are overloaded and have reached the point of not being able to continue to cope with the pressures they are experiencing (Lazarus & Folkman, 1984). Additionally, stress can affect a person's mental and physical health (Watson & Pennebaker, 1989).

Life Stress. Life stressors are events that can have a profound effect on a person's well-being (Holmes & Rahe, 1967). These events are comprised of major life changes (e.g., loss of a loved one), such as social changes (e.g., new relationship), occupational changes (e.g., new job), and financial changes (e.g., being fired) (Paykel et al., 1971).

Helping Professions. Helping professions are occupations that assist in the growth of and/or address issues with a person's physical, emotional, or spiritual well-being (Helping professions, 2016).

Delimitations

The first delimitation was the participants in this study. Only doctoral students from one university in the Southeastern United States majoring in educational leadership were invited to participate. The instruments used in this study measured life stress, burnout, and resilience. As such, none of the questions in the instruments explored preexisting mental health conditions.

Limitations

All investigative research has limitations. This section discusses the limitations that were present in the current study. A common theme among the studies of stress, burnout, and resilience was the use of self-report instruments. A self-report instrument is one where individuals rate themselves on the degree to which the characteristic describes them (Johnson & Christensen, 2012). Razavi (2001) studied the use of self-report instruments and criticized these measurements because of various biases such as social desirability and negative affectivity biases.

The current study was limited to a single administration of a self-report instrument. A one-time administration of the instruments was a limitation because variables were assessed at one point in time. This one-time administration was affected by changes in the student's circumstances (Denton, Miller, & Tobacyk, 1986; Nurmi, Salmela-Aro, & Tolvanen, 2011), life events that the student experienced at the time of the study (Crandall & Lehman, 1977), and/or the environment in which the student completed (Grier, Hanson, Skovolt, 2001).

Another possible limitation in the current study was the sample. Only students in one program from one university in the Southeastern United States were included; thus,

the findings were not representative of doctoral students at other universities. Threats to validity stemmed from selection bias. Students who suffered from burnout and/or stress may not have been enrolled because they left the program. Students with higher levels of resilience were more apt to participate in the study; whereas, students who were enrolled but suffered from burnout chose to not participate in the study.

Social desirability bias is the tendency for an individual to respond to a self-report measure in a manner that portrays him or her in a favorable light despite how he or she truly feels (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This bias can be detrimental to researchers because potentially hides relationships between multiple variables (Ganster, Hennessey, & Luthans, 1983). Further, social desirability bias can cause spurious relationships (Ganster et al., 1983).

Attrition bias was related to selection bias and is caused when participants discontinue the study (Juni & Egger, 2005). In this study, participants who dropped out of their doctoral program or did not respond to the online questionnaire could have responded differently than those who participated. The students who chose to participate could have had lower levels of life stress and burnout. Individuals who dropped out might have experienced an increased amount of exposure to life stress and burnout.

Another possible limitation to this study was that one of the co-chairs for this dissertation encouraged participation by sending out an email to the students. Students might have been unwilling to respond as the co-chair was one of their professors. Additionally, students who participated could have answered questions in a manner that would indicate lower levels of exposure to life stress and burnout due to social desirability.

Participants in this study might have had self-serving bias. Self-serving bias is a threat to validity, because individuals often respond to questions on an instrument inaccurately (Miller & Ross, 1975). Respondents often believe that successful events are a direct result of actions, and failures are the result of negative, uncontrollable outcomes (Nevid, 2013). Participants were selected to complete the instruments online, additional limitations might be present. Thompson, Surface, Martin, and Sanders (2003) research stated that some individuals in an online setting are more apt to participate, leading to systematic bias. This type of bias was minimized as all participants were invited to respond using online methods.

Another possible limitation was the fact that both doctoral programs being investigated use a cohort model. Cohorts typically are arranged in a nested structure based on program phase. Due to the nested structure being utilized in this study, students scored differently on the assessments based on their program phase.

Assumptions

This study had the following assumptions. The first assumption was that the students completed the instruments in an honest manner. The second assumption was that students were aware of the terminology used on the instruments. The third assumption was that using instruments provided more accurate responses of a person's internal reactions such as burnout as compared to other data collection techniques. The final assumption was that participants were self-aware and answered questions accurately related to their potential stress, burnout, and resilience levels.

Organization of the Study

This study is divided into five chapters. Chapter I serves as the introduction, and consists of a background of the study, statement of the problem, purpose of the study, educational significance of the study, theoretical framework, research questions, definition of terms, delimitations, limitations, assumptions, and the organization of the study. Chapter II reviews the literature as it relates to the elements of the study. Chapter III describes the research design, selection of participants, the instruments used, procedures, variables, data analysis, and a summary.

Chapter IV details the results of the three research questions examined in the study. Also included data analysis procedures and a summary. Chapter V contains a summary of the study results and connections of the results to the literature and theoretical framework. Implications for policy and practice, future research suggestions, and a summary is also included.

CHAPTER II

Review of the Literature

The literature review was the guiding force behind the selection of the topic and provided the research method for this study. Life stressors, burnout, and the mitigating effects of resilience are important factors that needed to be investigated. I could not locate a single study that examined all three constructs within a single investigation. Additionally, there were few, if any, studies that had investigated even one of the constructs on the sample population, that of educational leadership doctoral students. To this end, I added a section that investigated the differences between EdD and PhD degrees, particularly in education, as I believed this was an important topic. The literature review is divided into the following sections: (a) differences between EdD and PhD degrees, (b) life stressors, (c) burnout, and (d) resilience.

Literature reviewing conducted in this study was completed using the Interactive Literature Review Process (ILRP) Framework, which was created by Combs, Bustamante, and Onwuegbuzie (2010). The ILRP process involves nine stages: “(a) exploring belief systems, (b) initiating the literature review process, (c) selecting a topic, (d) exploring the literature: identifying themes, (e) formulating a focus: selecting/deselecting themes, (f) analyzing/interpreting/integrating literature, (g) closing the literature search; research saturation, (h) writing the literature review, and (i) evaluating the process and product” (Combs et al., 2010, p. 162). As Combs et al. (2010) recommended, I participated in mentorship with my co-chairs at each stage of the process, wherein the literature review process was truly interactive.

Standards and Criteria for Literature

When I first began the literature review process, I chose to explore and examine literature surrounding (a) the differences between the EdD and PhD degrees, particularly as it relates to education (b) life stressors, (c) burnout, (d) resilience. This initial literature review process began with the belief that life stressors and burnout were constructs that had negative effects on not only people in general, but on particular students.

Additionally, I believed that resilience was an important innate trait that can lessen or even extinguish the negative effects of burnout and life stressors. As removing personal biases was not possible, I acknowledged my beliefs and the fact that they may have influenced the manner in which literature was reviewed, as described in the ILRP (Combs et al., 2010).

I initiated the literature process by utilizing various databases (i.e., Academic Search Complete, Education Full-Text, Education Source, ERIC, PsycARTICLES, Psychology and Behavioral Sciences Collection, and PsycINFO) through the university's library and Google Scholar. My searches consisted of a combination of keywords that were designed to provide insight into my selected variables. To help lessen my preexisting beliefs on my selection of the literature reviewed, I used two guiding questions: (a) To what extent did the literature provide me with a deeper understanding of burnout, life stressors, and resilience; if so, how? (b) To what extent did the literature aid me in my understanding of relationships among the variables?

The Differences Between EdD and PhD Degrees

Doctoral degrees in education, specifically PhDs, date back to 1893 when the Teachers College of Columbia University awarded the first doctoral degree with an

emphasis in education (Shulman et al, 2006). Harvard University was the first to award an EdD in 1921 (Bista & Cox, 2014). By the 1950s, 92 universities had awarded one or both educational doctorates (Moore, 1960); by 1983 the number of institutions granting a doctoral degree in education had reached 167 (Anderson, 1983). In 2005 the number of institutions that awarded a doctoral degree exceeded 250 institutions (Shulman et al., 2006). In 2015, according to the Survey of Earned Doctorates (2015), there were 432 U.S. universities that awarded a doctoral degree.

According to the National Center for Education Statistics (2012-13) there were a total of 175,038 doctoral degrees awarded in the United States. Within the field of education, there were a total of 10,572 doctoral degrees awarded of which 3,418 were male and 7,154 were female. Further investigation with data provided by the National Center for Education Statistics (2013-14) indicated that there were 254 institutions that offered an EdD, whereas 298 universities offered a PhD.

There are multiple universities that offered only a PhD in education; some examples include Stanford, Columbia, and Loyola. Examples of universities that offer both a PhD and an EdD in education include Harvard, Johns Hopkins, University of North Texas, University of Florida, and University of Georgia. Examples of universities that offer only an EdD in education include Sam Houston State University, Pennsylvania State, University of Southern California, and Vanderbilt.

The EdD and PhD typically have a different emphasis. According to Johns Hopkins, the EdD program is part-time and is designed to prepare educational scholars to be transformational leaders in education (Johns Hopkins University, 2016c). Johns Hopkins' PhD is a full-time program that is research intensive and designed to prepare

scholars who will address policy and practice challenges within education (Johns Hopkins University, 2016c). The differences in programs offered at Johns Hopkins were echoed by researchers who indicated that the PhD trains faculty, and the EdD trains individuals wanting to become an administrator (Gold & Walker, 2006; Toma, 2002). However, some researchers have argued that the differences between the EdD and PhD degrees is trivial (Carpraro & Thompson, 2008; Toma, 2002).

Both the PhD and EdD have more similarities than differences; both degrees typically have required coursework, research activities, comprehensive exams, and a dissertation (Toma, 2002). According to online resources provided by College of Education doctoral programs, some EdD and PhD programs have different credit-hour requirements, such as Johns Hopkins University where their EdD program totals 54 hours in length (Johns Hopkins University, 2016a), whereas the PhD program is 90 hours (Johns Hopkins University, 2016b). Differences in the two programs exist in the amount of dissertation hours, amount and style of research methods coursework, and number of statistics hours required (Harvard, 2016; Johns Hopkins University, 2016d). Harvard as of the fall of 2012 offered both a PhD and EdD in education; however, the last cohort of students to be able to graduate with an EdD in education was in the fall of 2013. Harvard stated that this requirement was changed to emphasize the research component that was a hallmark of their program (EdD) dating back to the 1920s (Harvard, 2016).

The Survey of Earned Doctorates (2015) investigated demographic averages for all doctoral degrees in the field of education and published a report that the average doctoral student in education was 38.6 years old, married (55.8%), and female (68.4%). Early studies conducted by Dohrenwend (1976) contended that the actual amount of life

stress experienced by men and women was approximately equal, but women had a greater likelihood of being affected. In contrast, Mallinckrodt and Leong (1992) found that married women had a lower amount of social support within the family and this finding could lead to an increased amount of stress. According to Jogaratnam and Buchanan (2004), female students are more apt to suffer from the signs and symptoms of stress. The findings were echoed in studies conducted by other researchers (Backovic et al., 2012; Mallinckrodt & Leong, 1992), who indicated that females were more likely than males to report a greater amount of stress experienced from stressful life events. The aforementioned articles are important to the scope of this research because EdD programs were comprised primarily of females. Females were more likely to suffer from stress when they had experienced stressful life events, and an individual must experience enough stress to become burned out (Backovic et al., 2012). Findings reported in my study were primarily applicable to research on the sample of EdD doctoral students studying educational leadership with an emphasis in either higher educational leadership and/or K-12 leadership at one institution.

Stress

Stress first appeared in the English language in the 14th century, meaning hardship and/or adversity (Lazarus, 1993). In the 17th century, a physicist named Robert Hooke started using the words stress, load, and strain with relation to his interest in the effects of winds, earthquakes, and other natural disasters' effect(s) on man-made structures (Hinkle, 1974). Hooke defined load as the weight on the structure, stress was the area over which the load was placed, and strain was the juxtaposition of these forces on the structure (Hinkle, 1974). In light of the changing usages of *stress* words in

correlation to modern models of stress, Hooke's thoughts greatly influenced psychology, sociology, and physiology; he developed the idea of stress as an external force placed on a psychological, social, or a biological system (Lazarus, 1993).

Historical background. Stress, historically, has been viewed as either an external or internal phenomenon (Hobfoll, 2001; Lazarus, 1993). Hobfoll (1989) defined psychological stress as the result of "perceived and actual loss or lack of gain" in the form of "a reaction to the environment" (p. 516). The investigation of stress as related to college students has a long history within peer-reviewed journals. A large percentage of the articles published concerning stress and college students has been related to vocational career tracks, for example: (a) legal studies (e.g., Leahy et al., 2010; Rand, Martin, & Shea, 2011; Sheehy & Horan, 2004), (b) medical doctoral studies (e.g., Abdulghani, AlKanhal, & Mahmoud, 2011; Behere, Yadav, & Behere, 2011; Leahy et al., 2010), and (c) social and nursing students (e.g., Gibbons, 2010; Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2011; Watson et al., 2009). However, as stress relates to educational leadership doctoral students, no articles were available.

Stressful life events. Numerous studies exist that correlate stressful life events with mental and physical health issues across a wide population (Rahe, 1972; Low et al., 2012). In an examination of the keywords, *stressful life events and college students* appeared simultaneously 597 times. A search for the frequency of coordinated terms *graduate students and stressful life events* imparted 41 results. Only two results were conveyed when the terms *stressful life events and doctoral students* were combined, and no results were provided in correlation with both *educational leadership and doctoral students*. Smyth, Hockemeyer, Heron, Wonderlich, and Pennebaker (2008)

conducted a large-scale study that was comprised of 6,053 undergraduate students from a variety of academic settings (i.e., public and private institutions and geographical locations) to examine the prevalence of stressful life events and how these stressful life events impacted students. The researchers discovered that 66% of the students experienced at least one stressful life event. These stressful life events resulted in 20% of the examined student population having Post Traumatic Stress Disorder (PTSD). Smyth et al. (2008) believed that many students would not self-identify as having suffered a stressful life event, but would acknowledge that they have experienced one if given a self-report questionnaire. The authors suggested that colleges and universities consider giving a self-screening questionnaire to all incoming students. They argued that doing this screening would give college mental health centers, advising staff, and faculty an opportunity to share with these students the support programs offered at their respected institutions. Much like the previous study and the health issues that arise due to the experience of a stressful life event, Anders, Frazier, and Shall (2012) conducted a study to ascertain the relationship between life event exposure and changes in mental health. The research consisted of 842 undergraduate students and 242 community college students who completed online questionnaires. The researchers discovered that students who had been exposed to the greatest number of stressful life events also reported the greatest amount of mental and physical health issues. Of note, the researchers indicated that community college students were exposed to more stressful life events than their university counterparts. Anders et al. (2012) concluded that counselors and faculty members should be aware that many of their students have been exposed to a variety of stressful life events, and these events might have influenced their behaviors in the

classroom. The authors encouraged counselors and faculty to develop an outreach program for students who exhibited stress. To examine stressful life events on a single sex population, Frazier and Schauben (1994) studied 282 female undergraduate college students, the stressful life events they experienced, and how they made psychological adjustments. Frazier and Schauben (1994) instituted that the largest stressful life event was the death of a significant other (e.g., partner, friend, or family member). As related to general stressors, the authors discovered that students who reported the highest amounts of exposure to stressful life events also had the highest amount of mental health issues (e.g., depression, fear, anxiety). One recommendation the researchers made was that faculty members should consider embedding coping training programs into their curriculum. Use of healthy coping behaviors by students can alleviate unhealthy coping mechanisms (e.g., drugs, alcohol) and generally help lessen the stress experienced from stressful life events. In a study of 56 counselor education graduate students, Calicchia and Graham (2006) investigated how stress related to a graduate student's spirituality and social support. All students in the study were returning adult learners who were employed full-time and had multiple life demands that required balancing family, physical health, and work. All students were given class time to complete two different quantitative assessments. Students in the study completed the Spirituality Well-Being scale, which was used to assess the degree to which a respondent had a satisfying relationship with a higher power. Students also completed the Stress and Social Resources assessment, which was used to measure stress and social resources as separate domains. After compiling the results, researchers reported that spirituality and having multiple social supports resources were effective mediators of stress. Mallinckrodt and Leong (1992)

conducted a study to investigate the interplay of stress and social support among 106 international graduate students who resided in campus graduate housing at a large eastern university. Gender differences were a major contributing factor into how international students sought social support. For example, men valued the supportive relationships of faculty members, whereas women valued the relationships they had with their peers. The researchers advocated for the development of an intervention program where students would learn how to build support systems.

Student stressors. The literature on college student (i.e., undergraduate, graduate, doctoral, and professional) stressors is extensive, and the most common stressors included tests (e.g., Parsons, 2008; Strack & Esteves, 2015), time management (e.g., Hafner, Stock, & Oberst, 2015; Mirzaei, Oskouie, & Rafii, 2012), financial issues, (e.g., HanNa, Heckman, Letkiewicz, & Montalto, 2014; Serido, Shim, Xiao, Tang, & Card, 2014), dietary changes (e.g., Richardson, Elliott, Waller, & Bell, 2015), career decisions (e.g., Bullock-Yowell, McConnell, and Schedin, 2014; Workman 2015), and parental pressures (e.g., Shen, Yu-Hsin, Abraham, & Chih-Yuan, 2014; Workman, 2015). Bullock-Yowell et al. (2014) conducted a study to investigate stress that accompanies students who had not chosen their college major. The 226 undergraduate students were divided up into two groups. The first group was those students who had not decided on a major; the second group consisted of students who had declared a major. All students received a series of different questionnaires to ascertain the differences the level of career decision making had on self-efficacy, negative career thinking, and career decision-making difficulties. The authors indicated that undeclared students had a statistically significant lower career decision self-efficacy and a greater difficulty in their career

decision making process. Bullock-Yowell et al. (2014) concluded that the stress caused by not having declared a major, while not unavoidable, could be amended. One suggestion they made was to offer career exploration workshops or classes. The authors believed that these workshops or classes would be beneficial to students. Workman (2015) also investigated the stress generated by students from choosing a college and a college major. However, Workman (2015) focused on the influence that the students' parents have in the decision-making process. The study was comprised of 12 students. Six students were incoming freshman and six were sophomores. All students in the study entered college undecided on a major and all students lived in a living learning community. Living learning communities were designed to house students with similar majors together to increase the likelihood that the students would have increased levels of peer interaction and academically supportive faculty (Shapiro & Levine, 1999). The students were asked a series of questions in a semi-structured interview. Parents had a large amount of influence in both the college and the major the students selected. Although the majority of students presented positive familial influence, others did not. Some students experienced stress by selecting a major for which their parents did not approve. Finally, Workman (2015) recommended that more research be conducted on the subject, particularly as related to students who go against the college major choice of their parents. Richardson et al. (2015) investigated the relationship between stress and financial difficulties among 444 undergraduate students. The students in the study were given a survey to ascertain the varying stressors they experienced. Financial difficulties were the largest stressor for undergraduate students in the study. Richardson et al. (2015) recognized a correlation between a student being stressed about his or her financial

difficulties and having an eating disorder. The authors concluded that future research is needed to understand the factors that might mediate the connection between financial difficulties and eating disorders. Serido et al. (2014) conducted a quantitative study comprised of 748 college students to ascertain how college students cope with financial difficulties. Students who were the most stressed about their financial resources tended to be reactive in their spending. The authors believed that financial literacy training can provide college students with the means and methods to manage financial demands in a healthy way. HanNa et al. (2014) also investigated how financial stress can influence the overall mental health of college students. The study consisted of 4,713 college students who completed a questionnaire measuring financial literacy. Research results demonstrated that an increased amount of financial literacy would lead to a lessened amount of stress associated with student finances. HanNa et al. (2014) recommended that colleges and universities should increase financial literacy services offered on campus, because an increase in financial self-efficacy directly correlates with overall stress associated with finances throughout a student's lifetime. Parsons (2008) investigated stress that students experience related to tests. Parsons conducted a literature review on test-taking anxiety, and recommended multiple ways that professors could modify methods of giving tests. Highlights of Parson's recommendations were as follows: (a) hire excellent faculty and encourage the faculty to have study sessions before a test is given, (b) provide students with a variety of different assessment techniques, (c) allow more open-book exams, (d) ask students individualized questions or allow students the option to take an oral exam, and (e) ease the time constraints for taking the test. Parsons (2008) recommended test-taking training be offered for students on a regular basis so that

they can learn how to prepare for a test. Strack and Esteves (2015) focused on the stress and anxiety experienced by students caused by an approaching exam. Their study consisted of 103 undergraduate students who were given a questionnaire each day for 10 days before an exam was given. Upon conclusion of the data collection, authors determined that stress and anxiety can be a positive emotion; some students interpreted the approaching exam as a challenge rather than as a threat. Additionally, the students who interpreted the exam as a challenge also scored higher on the exam. Strack and Esteves (2015) agreed with previous research conducted on stress and anxiety, which has posited that individuals reacted to stressors based on how they were internalized. Bland et al. (2012) conducted a quantitative study that was comprised of 246 millennial freshman students to ascertain coping mechanisms employed by students to alleviate stress. Researchers in this study compiled and adapted the Life Events Checklist, Daily Hassle Questionnaire, Stress Symptomology Inventory, and the Coping Mechanism Check Sheet in order to create the Stress Tolerance Questionnaire. The most frequent stressors and daily hassles reported by the respondents were pressure to do well in school, changes in living conditions, beginning college, choosing a major, and a busy academic lifestyle. The students in this study reported multiple coping strategies (e.g., listening to music, calling mom, surfing the internet). Researchers believed that the level of stress experienced by college students is related to their coping strategy. Some students used maladaptive coping strategies (e.g., using illicit substances, watching a movie, social networking), and had higher stress levels than their counterparts. Students with lower stress levels utilized healthy coping strategies, such as being active in extracurricular activities, exercising, reading/writing, and listening to music. Bland et al. (2012)

recommended that universities offer help and advice to students taking a first-year experience class on how to embrace healthy coping strategies as a way to increase stress tolerance. Mirzaei et al. (2012) investigated how time management skills lessened the stress experienced by college students. The researchers conducted 21 interviews to determine how students cope with academic and personal demands related to their time management skills. The authors verified that students who prioritized their time had the lowest amounts of stress and a lessened amount of guilt for how they spent their time. Authors encouraged students to learn about the academic time requirements for their chosen programs and potentially alter their major choices if their academic programs require a greater time commitment for studying than they are willing to give. By managing time well, students would be able to give time to studying for exams, thereby potentially reducing stress caused by exam performance.

Burnout

I initiated my research into burnout by exploring keywords *burnout and Maslach Burnout Inventory*. This search yielded 3,587 results. I also used the following keywords: (a) *Maslach Burnout Inventory – Student Survey* (75 results), (b) *burnout and students* (4,364 results), (c) *burnout and college students* (516 results), (d) *burnout and graduate students* (163 results), (e) *burnout and doctoral students* (63 results), (f) *burnout and higher ed leadership students* (0 results). Many of the articles used were not selected for the literature review because they lacked a connection to the present study. I also selected articles and dissertations to use for my literature review by reviewing the reference lists in the articles that I reviewed.

An individual exposed to stress for prolonged periods of time may experience the fight or flight response (Benson, Beary, & Carol, 1974); when stress response continues long enough, burnout can occur (Maslach & Leiter, 2008; Pines & Aronson, 1981; Schaufeli et al., 2002). Characteristics of impending burnout include exhaustion (i.e., physical and mental), lessened sense of personal accomplishment, lowered levels of motivation, demoralization, and depersonalization (Maslach, 1986; Maslach & Jackson, 1985; Pines & Aronson, 1981). A person who does not adequately address burnout might experience reduced quality of life and poor work performance (Maslach & Leiter 2008; Pines & Aronson, 1981; Schaufeli et al., 2002).

Burnout was a term coined by Freudenberger (1974), meaning “to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources” (p. 159). Many scholars believe that Freudenberger used Graham Green’s novel, *A Burn-Out Case*, as inspiration for the development of his definition. In Green’s novel, a gentleman who is spiritually tormented and disillusioned quits his job as an architect to escape into the jungles of Africa. The book’s protagonist is a world-famous architect who has lost his desire to design buildings and his want to sleep with women. He feels incredibly alone, and in his personal deadness he can neither laugh nor suffer. Green’s character epitomizes the definition of burnout.

Maslach and Jackson (1985) defined burnout as a “syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment” (p. 837). Since Maslach and Jackson’s (1981) seminal research investigation on burnout, scholars have continued research on burnout using the belief that a psychological state can manifest itself in multiple ways including anxiety, depression, drop in self-esteem, substance

abuse, decreased performance, sleep disturbances, work/family conflicts, and increased health problems (Bacharach, Bamberger, & Conley, 1991; Belcastro & Gold, 1983; Jackson & Maslach, 1982; Maslach et al., 2001; Melamed, Shirom, Toker, Berliner, & Shapira, 2006; Taris, 2006).

A common tool researchers have used to measure burnout is the Maslach Burnout Inventory (MBI; Maslach et al., 2001). The MBI is divided into three subscales: emotional exhaustion, depersonalization, and reduced personal accomplishment. Scholars believe that when someone is suffering from burnout, he or she progresses through each stage in order and results in a downward spiral of available resources over time (Taris, LeBlanc, Schaufeli, & Schreurs, 2005; Wright & Hobfoll, 2001).

Historical background. Pioneering work on burnout by Maslach and Jackson (1981) led to the development of the MBI. This inventory later became the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) (Maslach et al., 2001), after researchers discovered that burnout also befalls individuals who work in fields outside of “people-work” professions (p. 99). In their research, Maslach and Jackson (1981) observed that staff-client interactions in a mental health setting can cause staff members to suffer from chronic stress. Chronic stress is often “emotionally draining and poses the risk of burnout” (Maslach & Jackson, p. 99). Before the introduction of the MBI, researchers discovered that mental health service providers suffering from burnout often delivered a lower level of services (Freudenberger, 1974, 1975; Maslach, 1976, Maslach, 1978a, 1978b; Maslach & Jackson, 1978; Maslach & Pines, 1977, Pines & Maslach, 1978). Additionally, employees suffering from burnout have a higher tendency to leave jobs, miss work, and have a lowered morale (Maslach & Jackson, 1981).

Burnout components. Through the development of the MBI, Maslach and Jackson (1981) determined that burnout had three distinct components: (a) emotional exhaustion, (b) depersonalization and/or cynicism, and (c) reduced personal accomplishment.

Emotional exhaustion. Maslach and Jackson (1981) defined emotional exhaustion as a term that encompasses the feelings of “being emotionally overextended and exhausted by one’s work” (p. 101). Other scholars stated that emotional exhaustion is characterized by physical and emotional depletion as a result of overbearing job demands and ceaseless work-related hassles (Shirom, 1989; Zohar, 1997). Still others have defined emotional exhaustion as a state-of-being where individuals have a feeling of not being able to give any more effort because there is nothing left to give (Maslach & Goldberg, 1998; Maslach et al., 2001).

Depersonalization or cynicism. A person exhibits signs of depersonalization might appear disinterested, rigid, and apathetic in attitudes and behaviors towards others (Arabaci, 2010). Maslach and Jackson (1981) believed that depersonalization is characterized as an “unfeeling and impersonal response towards recipients of one’s care of service” (p. 101). Moreover, a person who experiences depersonalization often minimizes interactions with people to alleviate emotional baggage. Depersonalization often manifests as behaviors such as hostility, lack of interest, ignoring requests of others, and acting in a rude manner (Kim, Shin, & Umbreit, 2007; Leiter & Harvie, 1996; Maslach et al., 2001; Maslach & Jackson, 1981). Depersonalization is a term that lies within the domain of those who work in human services professions; whereas, the term cynicism is used for individuals who work outside of human services professions

(Salanova et al., 2005). A worker within the human services profession will distance themselves psychologically from their patients; whereas a cynical employee working outside of human services professions will exhibit a similar psychological distance, but towards their work. The distinguishing difference between depersonalization and cynicism is the target of distancing

Reduced personal accomplishment. Maslach and Jackson (1981) believed that people suffering from reduced personal accomplishment believe that they are not competent, but they tend to remain effective in their work environments. Depression and an inability to cope are often the manifestations of a reduced level of self-efficacy and can be compounded by a lack of social support (Maslach & Golderg, 1998). Researchers have uncovered that increasing the amount of time spent with personal support networks reduces the individual's perception of his or her lack of personal accomplishments (Jacobs & Dodd, 2003).

Burnout and students. The majority of literature on burnout has focused on the helping professions and students studying the helping professions (Schaufeli al., 2002; Taris, 2006). Research on graduate and doctoral students attaining a degree within the helping professions has been researched more than other academic disciplines; however, research on graduate and doctoral students studying a degree program outside of the helping professions has been limited (Greenhaus & Parasuraman, 1987). This literature review focuses primarily on undergraduate and graduate students who were studying in a helping professions program. Since 2000, some researchers have focused their investigations on student burnout (Hu & Schaufeli, 2009; Schaufeli et al., 2002a). Schaufeli and Taris (2005), declared that students' expected scholastic demands were

similar to work (e.g., attending classes, doing assignments, passing classes). Previously considered exclusive to work-related stress, burnout exists in student-related fields manifesting itself through a variety of ways: experiencing exhaustion “because of study demands, having a cynical and detached attitude towards one’s study, and feeling incompetent as a student” (Schaufeli et al., 2002, p. 465). Research has been conducted on students with a multitude of academic disciplines. For example, Lin and Huang (2013) investigated the extent to which life stress could predict burnout. The researchers administered the undergraduate life stress scale and the learning burnout scale to 2,640 students across five universities. Their results indicated that women and upper classmen reported higher levels of life stress and burnout. Additionally, academic burnout was predicted by (a) future development stress (worried about future), (b) interpersonal stress (worried about interactions with others), (c) self-identity stress (identity versus role diffusion), and (d) academic stress (e.g., school related activities). Lin and Huang (2013) concluded that universities ought to consider the creation of a required stress management course and/or creating stress management component(s) into each class. Lin and Huang (2013) also argued that if students develop healthy coping strategies, the level of experienced burnout would be lessened. There have been several researchers who have investigated online undergraduate students. For example, Nichols (2010) studied online undergraduate students experienced burnout and did not complete the semester. The main reasons students listed for not completing the semester were as follows: (a) large amount of coursework, (b) lack of time management skills, and (c) unpreparedness for the demands of taking online classes. Interestingly, the students who completed their semester of classes accredited their success to assistance from their support network:

professors, academic advisors, and classmates (Nichols, 2010). Similarly, Pavalakis and Kaitelidou (2012) investigated burnout among graduate students enrolled in a university healthcare management distance education program. The researchers distributed a questionnaire during the program's second academic year during two student group meetings; one at the start of the semester and the second was at the end of the semester. One study from Pavalakis and Kaitelidou's (2012) stated that students had a higher level of burnout as the semester progressed. The researchers believed that burnout levels increased because the class added additional stress to students, many of whom were working professionals. Pavalakis and Kaitelidou (2012) advised that further research should be conducted examining ways to provide support for students. One suggestion of increased student support included posting information on the university's website about stress management. Stress and stress management strategies of students studying within the helping professions have been explored with some regularity. Chang, Eddins-Folensbee, and Coverdale (2012) sought to investigate burnout among doctoral medical students. Results indicated that burnout was statistically significant for all students regardless of the amount of time they had invested in an educational program. Like other studies have suggested, support from faculty, classmates, and other relationships outside of their academic program were paramount in alleviating burnout. Additionally, Chang et al. (2012) suggested that involvement in extracurricular activities can be an important alleviator of burnout because success and involvement raises one's feelings of personal achievement. In a study focused on undergraduate students majoring in premedical studies, Fang, Young, Golshan, Moutier, and Zisook (2012) assessed the relationships between burnout and premedical status while controlling for depression. Fang et al.

(2012) gave a demographic questionnaire, two instruments (i.e., the Maslach Burnout Inventory-Student Survey [MBI-SS], and the Patient Health Questionnaire [PHQ]) to 618 premedical students and 1,441 non-premedical students. The MBI-SS measures burnout and the PHQ measures severity of depression. Fang et al. (2012) indicated that premedical students were more likely to be depressed and burned out as compared to students not majoring in premedical sciences. Regardless of program of study, women tended to suffer from greater amounts of depression and burnout. The authors recommended additional research to understand better the causes of burnout and to develop coping models and strategies to help alleviate burnout within their student population. Graduate students studying mental health counseling were examined in Lushington and Luscri's (2001) study. Researchers discovered that students who reported feelings of loneliness had the highest rates of burnout, while students who had a strong support network demonstrated critical mitigation to the effects of burnout.

Similarly, Clark, Murdock, and Koetting (2009) investigated burnout among counseling psychology doctoral students and the researchers reported that lack of advisor support was the greatest predictor of burnout. In agreement with what other researchers have established, lack of advisor support has consistently been shown to predict burnout among graduate students (e.g., Ross, Altmaier, & Russell, 1989; Russell, Altmaier, & Van Valzen, 1987). Some have argued that students who believe that they are not living up to their advisor's goals and/or think that their advisor is not being supportive often have a higher level of burnout (Clark et al., 2009). Clark et al. (2009) recommended that academic program administrators consider having regular meetings between the students and their advisor. Much like how undergraduate students' social support system (i.e.,

friends, family, and classmates) is a crucial component to burnout prevention, these support systems can be important for graduate and doctoral students. Social support provided by faculty and advisors (Gelso & Lent, 2000) is a critical mitigating factor in reduced emotional exhaustion and lower chances of doctoral program drop out.

Researchers examined the importance of advisor support as a predictor of burnout among graduate students (Clark et al., 2009; Ross et al., 1989; Russell et al., 1987). Researchers have concluded that students are more likely to experience burnout when they perceive an inability to meet advisors' academic expectations and/or feel as if advisors are not providing enough support. Hunter and Devine (2016) believed that faculty should receive explicit training in the areas of social support (i.e., mentoring) and argued that doctoral students might have lower levels of burnout. As a result, doctoral students might have more chance of successfully completing a doctoral program. In summary, students can experience burnout in college for a myriad of reasons. Researchers have observed that students experience burnout when stressors are greater than their capacity to cope. The stress can come from students' academic coursework or from the accumulation of stressful life events. Researchers have also noted that graduate students might experience burnout because they believe they are not living up to their advisors' expectations or believe that their advisors are not providing adequate support.

Resilience

The literature review on resilience began with a query exploring multiple keywords. Both *resilience* and *resiliency* were used in all searches. The following searches were conducted with their accompanying number or results: (a) *resilience and undergraduate students* (377 results), *resiliency and undergraduate students* (117

results), (b) *resilience and graduate students* (293 students), *resiliency and graduate students* (109 results), (c) *resilience and doctoral students* (65 results), *resiliency and doctoral students* (28 results), (d) *resilience and PhD* (207 results), *resiliency and PhD* (94 results), (e) *resiliency and EdD* (4 results), *resiliency and EdD* (0 results), *resilience and higher education leadership* (17 results), *resiliency and higher education leadership* (4 results), (f) *resilience and educational leadership doctoral* (0 results), and (g) *resiliency and educational leadership doctoral* (0 results). Many of the articles that the search provided were not selected because they did not have a connection to the study. Articles were selected from reviewing the reference list of the articles that were reviewed. Resilience is a term that has become increasingly popular in everyday conversation (Zautra, Hall, & Murray, 2010). Initially, resilience was only investigated within the field of developmental psychology (Luthar, 2006), but has since been investigated across multiple disciplines. Researchers have had difficulty defining (see Table 1), operationalizing, and measuring resilience (Cicchetti & Garnezy, 1993; Gordon & Song, 1994; Kaufman, Cook, Arny, Jones, & Pittinsky, 1994; Luthar, Cicchetti, & Becker, 2001; Luthar & Cushing, 1999; Rutter, 1987; Tarter & Vanyukov, 1999).

Table 1

Definitions of Resilience

Year	Author(s)	Definition
2001	Masten	“A class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development” (p. 228)
2003	Connor & Davidson	“The personal qualities that enables one to thrive in the face of adversity” (p. 76)
2004	Bonanno	“The ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event, such as the death of a close relation or a violent or life-threatening situation, to maintain relatively stable, healthy levels of psychological and physical functioning” (p. 20)
2005	Agaibi & Wilson	“Resilient coping to extreme stress and trauma is a multifaceted phenomena characterized as a complex repertoire of behavioral tendencies” (p. 197)
2008	Lee & Cranford	“The capacity of individuals to cope successfully with significant change, adversity or risk” (p. 213)
2009	Leipold & Greve	“An individual’s stability or quick recovery (or even growth) under significant adverse conditions” (p. 41)

Historical background. Research into resilience began in earnest starting in the 1970s as psychologists and psychiatrists started to investigate children who could have been at risk for developing psychological problems due to genetics (e.g., inherited issues) and/or environmental circumstances (Masten, 2001). These researchers believed that by investigating children who grew up to be mentally healthy adults despite their adversities, they could create intervention programs and help guide policy development (Anthony, 1974; Garmezy, 1971, 1974; Garmezy & Streitman, 1974; Masten, Best, & Garmezy, 1990; Murphy, 1974; Murphy & Moriarty, 1976; Rutter, 1979; Werner & Smith, 1982).

The first research on resilience used a cultural deficit model to focus on children who were experiencing adversity or were growing up with disadvantages (Masten, 2001). A cultural deficit model is the belief that cultural minority group students underachieve academically because of characteristics that are rooted in their culture. These original studies into resilience indicated that many of the seminal thoughts about resilience were misleading, if not completely incorrect (Masten, 2001). Originally, resilient children were believed to be remarkable and often defined as “invulnerable,” “stress-resistant,” “hardy,” or “invincible” (Benard, 1991, p. 2). This belief that resilient children were somehow special was explored by an article published in *Contemporary Psychology*, titled “Superkids of the Ghetto” (Buggie, 1995). However, resilience is now believed to be ordinary; resilience is a phenomenon that results from a human’s basic need and desire to adapt to the situation at hand (Masten, 2001). Werner, Bierman, and French (1971) helped define research into resiliency. Werner et al. (1971) conducted research in Kauai, Hawaii following an entire cohort of 698 children born in 1955 in a longitudinal study for 40 years. The researchers discovered that any children who were exposed to adversity later contended more successfully with issues such as delinquency, mental and physical health issues, and familial stability as opposed to children who did not contend with similar adversities (e.g., premature birth, unstable household, family members with mental illness). Werner et al. (1971) detected that almost one-third of the at-risk children displayed resilience. Children who displayed resilience went on to become caring and competent adults. The Werner et al. (1971) study led researchers to investigate other potentially adverse conditions such as poverty (Werner & Smith, 1992), familial mental health issues (Masten & Coatsworth, 1998), physical or emotional abuse (Cicchetti &

Rogosch, 1997), medical ailments (Wells & Schwebel, 1987), and life altering events (Bayat, 2007). The impetus behind this research was to investigate protective forces.

Protective factors. Protective factors are personal or environmental defenses that can augment a person's capacity to combat risks and cultivate adaption while simultaneously maintaining the ability to function normally in the face of adversity (Benard, 1991; Luthar, 2006; Rutter, 1985; Werner, 1990). Protective forces can also be defined as "assets that individuals actively use to cope with, adapt to, or overcome vulnerability or risks that reside within the individuals, families, social groups and communities" (Gilgun, 1996, p. 3). This shift, one of a strength-based model as opposed to the deficit model, turns "the situation around by translating negative risk factors into positive action strategies" (Gibbs & Bennet, 1990, p. 21). A strength-based model focuses on what the child does well instead of what the child does wrong.

Resilience in college students. Researchers have investigated resiliency in students and have stated that a resilient student is one who achieves academic success in spite of the adversity that he/she have faced in his/her learning (Arastaman & Balci, 2013; Sarwar, Inamullah, Khan, & Anwar, 2010). Similarly, many of the same resources that help college students also help academically successful students (e.g., Casanova, Garcia-Linares, de la Torre, & de la Villa Varpio, 2005; McNair & Johnson, 2009). Resilient students often have a mentor (Hassinger & Plourde, 2005; Zalaquett & Faliciano, 2004). Further, Thomsen (2002) posited that resilient people often stated that a staff person in their school years made an important impact in their life. Ceballo (2004) published that a number of students maintained that if not for the support of their high school guidance counselor(s) and teachers, they would not have pursued a higher

education. Brehm, Kassin, and Fein (2005) determined that many resilient students have an increased level of intrinsic motivation. Other researchers ascertained that resiliency is synonymous with internal attributes that can include characteristics such as one's personality, ability to get along well with others, empathy, verbal and nonverbal communication skills, sense of humor, and ability to remove oneself from unhealthy behaviors and/or people (Bernard, 1997; Thomsen, 2002). Bernard (1997) and Thomsen (2002) argued that the characteristics of being resilient can be learned. An example of a resilient statement is, "although I had to go through many hardships and obstacles to get to where I am today, I managed to pull through because I refused to give up" (Zalaquett & Feliciano, 2004, p. 16). Gardner and Holley (2011) studied first-generation doctoral students. The resiliency of individuals was the greatest determining factor in the successful completion of a doctoral degree. Many students in the study expressed frustration with the ambiguity of higher education. The themes that the first-generation doctoral students shared were (a) breaking the chain, (b) knowing the rules, (c) living in two worlds, and (d) seeking support. In Gardner and Holley's (2011) research, breaking the chain refers to the act of the students attending and graduating from college. Collectively, the students felt a tremendous amount of pride that they had persevered through academia. The students also expressed the difficulties of navigating higher education. For example, one student expressed that no one had educated him on the FAFSA. Collectively, students believed they were behind those who had parents with college degrees, because students of degreed parents had help navigating higher education. Students also mentioned the difficulty of living in two worlds: the business world and the world of higher education. Many students felt out of place in both worlds.

Finally, students cited support as being a critical component to success. Students often were intimidated to ask a professor for assistance. Collectively, students in this study believed that the primary contributor to their academic success was self-reliance. Gardner and Holley (2011) concluded by encouraging higher education administrators and faculty to undergo professional development on how to help first-generation students. The university setting offers a great amount of aid in developing and harnessing resiliency in graduate and doctoral students (Castro et al., 2011). For example, Protivnak and Foss (2009) examined counseling education doctoral students and focused on the students' positive and negative experiences with the departmental culture, faculty mentoring, academic rigor, and support systems. The most helpful experience that students cited to their success in the program was that of faculty mentoring. Students often cited the support and encouragement given by their chair as a chief reason for their continued enrollment and success within the program. Similarly, Hoskins and Goldberg (2005) confirmed that the university setting was a critical component of continued success. Hoskins and Goldberg (2005) studied doctoral students from various programs and discovered that social-personal relationships were paramount in the success of the students. Similar to Protivnak and Foss's (2009) study, Hoskins and Goldberg (2005) identified faculty mentoring as a major reason for students' persistence and resilience in continuing through their academic program. Research on the resilience of non-White doctoral students is a recent phenomenon. Patton and Harper's (2003) study analyzed African American females' opinions of graduate and professional school programs, and their research revealed that African American females believed that having a non-white, female mentor who could serve as a maternal figure within the university was paramount

to success. In a similar study, Lewis et al. (2004) ascertained that African American doctoral students in a predominately Caucasian university setting, completed their degree because of resilience. Common roadblocks and barriers that the students cited were feelings of segregation and isolation. Doctoral students noted positive relationships and learning how to succeed within the university system as positive supports that helped them graduate. If not for academic and personal resilience, multiple students stated that feelings of isolation would have driven them to leave their doctoral program. Shavers and Moore (2014) investigated female African American doctoral students and noted that supportive faculty mentorship was the most frequent predictor for doctoral students' successfully working towards their degree completion. Shavers and Moore (2014) claimed that mentorship is a critical component of achieving a doctoral degree and urged universities to consider adding mentorship into the tenure consideration. Resilience is a very important factor in the success of medical school students. In fact, the Association of American Medical Colleges (AAMC) believed that resilience is one of the most important personal factors in determining a student's success or failure in medical school. Medical school can be very stressful and is often thought to be a toxic environment (Tempski et al., 2015). In their examination of medical school students, Tempski et al. (2015) indicated that resilience has many positive factors for students. Research results illustrated that more resilient students experience a higher quality of life and lower levels of anxiety and depression. In another study, Slavin, Schindler, and Chibnall (2014) examined the effects of a curriculum change that included resiliency training. Resultant medical school students had lower levels of depression and anxiety throughout their studies (Slavin et al., 2014). Research into the importance of effective academic mentors

has been examined in few studies. Protivnak and Foss (2009) conducted a study to examine the experiences that doctoral counseling students undergo throughout their studies. The students in the study mentioned multiple factors that aided them in completing their studies: (a) department culture, (b) faculty mentoring, (c) academics, and (d) support systems. The researchers argued that the most important support that aided students in their persistence of a doctoral education was having a mentor. Most of the respondents mentioned that having a faculty mentor was crucial for them, although several students also mentioned that having a mentor outside of academia was also important. The importance of a mentor or supervisor was echoed by Nelson, Oliver, and Capps (2009) who corroborated that faculty mentoring relationships were an important aspect in doctoral students' degree program completion.

Summary

In Chapter II, I reviewed literature related to variables of stress, burnout, and resilience for doctoral students across multiple disciplines. The areas that were noted in this section were (a) differences between EdD and PhD degrees, (b) life stressors, (c) burnout, and (d) resilience. In Chapter III, I present the introduction, research questions, research design, selection of participants, instrumentation, procedures, variables, data analysis, and summary.

The literature was critical in helping me develop an understanding of how COR theory can be used to understand my variables. COR theory postulates that a person becomes stressed when he or she believes that there is a threat to or a loss of perceived material and/or psychological resources (Morelli & Cunningham, 2012). Lazarus and Folkman (1984) agreed with COR theory in that stress and burnout cause emotional

exhaustion when an individual's school and/or work demands exceed their resources (Brotheridge & Lee, 2003; Hunter & Devine, 2016; Maslach & Jackson, 1981). If a person is under stress for a long enough period of time and does not have adequate resiliency skills, then that individual may experience burnout (McManus, Keeling, & Paice, 2004). COR theory is a central component of resilience (Chen, Westman, & Hobfoll, 2015). Resilience is a mediating buffer that can arrest or lessen the effects of stress and burnout (Hjemdal, Aune, Reinfjell, Stiles, & Friborg, 2007). Research indicates that there are three components within resiliency theory as related to COR: (a) hardiness (Kobasa, Maddi, & Kahn, 1982), (b) self-esteem (Bandura, 1995), and (c) social support (Hobfoll, Parris, & Stephens, 1990).

CHAPTER III

Introduction

The purpose of this study was to determine the extent of differences among life stress, burnout, and resilience for educational doctoral students by program phase. A non-experimental, cross-sectional descriptive research design was used to describe the differences among educational doctoral students' levels of life stress, burnout, and resilience by program phase. Some scholars advocated that an assessment be given at the start of the program to potentially screen problems as it relates to mental health (Lievens et al., 2002). Collier and Morgan (2008) suggested that university administrators take an active effort to reduce student stress and adopt strategies to lessen traumatic life events. Backovic et al. (2012) believed that burnout was prevented if the university is willing to make structural changes to their program, which includes embracing a philosophy that supports and trains students. This lead to students who maintained mental health while matriculating through academic programs. Schwarzer and Warner (2012) argued that people with a high level of perceived self-efficacy tended to be more resilient. The findings of this study may help administrators of doctoral educational leadership programs identify a point in the educational doctoral program where levels of life stress and subsequent burnout may lead to attrition. This chapter is organized into the following seven sections: (a) introduction, (b) research questions, (c) research design, (e) selection of participants, (f) instrumentation, (g) procedures, (h) variables, (i) data analysis, and (j) summary.

Research Questions

The following research questions were examined:

1. To what extent are there differences in the level of life stress by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
2. To what extent are there differences in the level of burnout by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
3. To what extent are there differences in the level of resilience by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

Research Design

This research study was cross-sectional, descriptive, and nonexperimental in design (Johnson & Christensen, 2012). The purpose of cross-sectional research is to gather data at a single point in time (Johnson & Christensen, 2012). Often used in combination with Johnson and Christensen's (2012) cross-sectional research design, the purpose of descriptive nonexperimental research is to describe relationships that may exist among variables. A nonexperimental study is characterized by three conditions. The first condition states that there was not a random assignment to groups. This characteristic was true of this study, because each participant is in a group based on his/her individual program phase (i.e., first, second, or third phases). Similarly, the second distinguishing characteristic was that variables cannot be manipulated (Johnson & Christensen, 2012). The independent variable (program phase) cannot be manipulated because program phases were descriptive of the phase a student was in and cannot be changed. The third characteristic stated that there was a measured outcome. This

condition was accomplished by collecting measured outcomes (scores on instruments of assessment) and using the same three assessments for all participants, regardless of cohort or program phases. This descriptive nonexperimental research design was appropriate for the goals of this study.

Selection of Participants

Doctoral students in an educational leadership program at a medium-sized university in the southeastern United States were invited to participate in this study. A demographic questionnaire (Appendix A) allowed for characterization of the sample. Students from one university who were invited to participate in this investigation who were either working towards a specialization in Higher Education Administration ($n = 25$) or K-12 Leadership ($n = 28$).

Students who participated in this study had the following demographic information: Higher Education Administration ($n = 19$) or K-12 Leadership ($n = 11$). Racial categories are as follows: White ($n = 16$), Black or African American ($n = 10$), Hispanic ($n = 2$), Other ($n = 1$), and one participant chose not to respond. Gender distribution consisted of the following: women ($n = 20$) and men ($n = 10$).

Students were in one of three phases of the doctoral program. The first-phase group was comprised of students who completed less than 18 hours of doctoral student work. The second-phase group included students who completed more than 18 hours of doctoral work but less than 36 hours. Finally, the third-phase group consisted of students who had completed more than 36 hours and up to 51 hours of their doctoral program.

Instrumentation

A paragraph at the beginning of the online survey consisted of the following: a brief description of the research study's importance to an educational community, a link containing written acknowledgement of students' rights and assurance of privacy regarding their information, and a link to the online survey (see Appendix B) for this research study. Submitting the online survey constituted of participants giving their consent as contributors to data in the study.

The data collected in this study was obtained through the use of a questionnaire distributed to graduate program students. The questionnaire was web-based, and data collected was self-reported. Data consisted of demographic information regarding the student's doctoral program specialization, program phase, gender, race/ethnicity, relationship status, age, and job title. Additionally, the questionnaire contained three instruments: the Social Readjustment Rating Scale, the Maslach Burnout Inventory-Student Survey, and the Brief Resiliency Scale.

Brief Resilience Scale (BRS)

The Brief Resilience Scale (BRS) was used to measure the varying levels of resilience for individuals who took the assessment. The BRS measures generalized resilience, but it does not necessarily measure academic resilience. When the BRS was created to "assess the ability to bounce back or recover from stress" (Smith et al., 2008, p. 194), two of the original test group populations were university students. Further, the BRS was designed to measure an individual's ability to cope and adapt to stressful life situations (Garcia-Dia, DiNapoli, Garcia-Ona, Jakubowski, & O'Flaherty, 2013). The BRS predictably measures four resilience subgroups: personal characteristics, social

relations, coping, and overall health (Smith et al., 2008). The BRS was initially tested on four different groups of people. The first two groups were comprised of 128 undergraduate students. The third group had 112 cardiac rehabilitation students, and the fourth group were 50 women who either suffered from fibromyalgia ($n = 20$) or had issues with health controls ($n = 30$). The BRS asks participants to answer six questions: three are positively worded (questions 1, 3, and 5) and three are negatively worded (questions 2, 4, and 6). This was done to mitigate the effects of social desirability and bias that could have been caused by positive/negative responses. The BRS uses a 5 point rating scale; strongly disagree (1) to strongly agree (5). When scoring the BRS, a numeric sum below 3.00 indicates a person with low levels of resilience and a sum score above 4.30 is considered a person with a high level of resilience.

When internal consistency was tested, Smith et al. (2008) reported a Cronbach's alpha that ranged from 0.80 to 0.91. This result was demonstrative of a good internal consistency for the group assessed (Shevlin, Miles, Davies, & Walker, 2000). When testing for test-retest reliability, Smith et al. (2008) observed a correlation coefficient of 0.69 for one month (cardiac rehabilitation patients) "using 48 participants from Sample 2 (students) and 0.62 for three months in 61 participants from Sample 3" (Smith et al., 2008, p. 197). These scores indicate that there was an adequate level of score reliability with the groups studied by Smith et al. (2008).

Maslach Burnout Inventory-Student Survey (MBI-SS)

The Maslach Burnout Inventory-Student Survey (MBI-SS) was an adaption of the Maslach Burnout Inventory-General Survey (MBI-GS), which was an adaptation of the Maslach Burnout Inventory (MBI). The MBI was created by Maslach and Jackson (1981)

to measure burnout in professionals who worked within the human services professions. Later the MBI-GS (Schaufeli et al., 1996) was adapted from the MBI because researchers believed that workers outside of human services were also suffering from professional burnout. Finally, the MBI-SS (Schaufeli et al, 2002) was created because researchers argued that students also suffer from burnout. Researchers believed that school work can lead to burnout similar to professional work.

The MBI-SS consists of 16 items and asks similarly worded questions as the MBI-GS, but instead of “work,” the word “school” is used or the word “employee” is replaced by “student” (Schaufeli et al., 2002). Structurally, burnout in the MBI-SS is comprised of three components. The three components are feeling exhausted (five items), being cynical (4 items), and perception of self-efficacy (6 items). Exhaustion is the experience of being mentally and physically exhausted due to the demands of studying or school work. A cynical student can be defined as someone who is disinterested and apathetic about their academic program. Efficacy refers to positive feelings by the student about their abilities to do the work; efficacy can be helpful in overcoming obstacles. The MBI-SS has students specify to what extent they agree with the statement. The scale is scored on a 7-point rating scale ranging from 0 (never) to 6 (always). In using the MBI-SS, burnout is associated with scoring high on exhaustion and cynicism subscales and scoring low on the efficacy subscale. Internal reliability using Cronbach’s alpha values were calculated by researchers in previous studies (Iwanicki & Schwab, 1981; Gold, 1984) with reported values as follows: MBI-GS had values of .90 for emotional exhaustion, .76 for cynicism, and .76 for self-efficacy.

Social Readjustment Rating Scale

Holmes and Rahe (1967) created the Social Readjustment Rating Scale (SRRS). The scale utilizes 43 life events that help measure the impact of common life stressors and was used to gauge contribution of life stressors experienced by doctoral students. The scale is based on the assumption that positive life events (e.g., marriage) and negative life events (e.g., divorce) all induce stress. A higher total cumulative score indicates that an individual is more susceptible to suffering from mental and physical manifestations of stress. Linden (1984) conducted a study, using a modified version of the SRRS, which examined 36 common life stressors experienced by undergraduate college students. Results indicated that individuals who scored high on the SRRS were statistically significantly more likely to suffer from illness or stress, sought mental health more often than low scorers, and were more apt to fail a course.

In the SRRS, examinees responded with a yes or no, and considers if the noted activity has occurred within the past year. When scoring the measure, a score of 0-150 indicates that the person has a low to moderate chance of exhibiting mental and/or physical signs of stress in the near future. Holmes and Rahe (1967) discerned that an individual with this score had less than a 33% likelihood of suffering from stress. A score of 150-299 suggests that the person has a moderate to high likelihood of becoming stressed in the near future with a likelihood percentage of 53%. Finally, a score of 300-600 implies that the individual is at a high risk of becoming stressed in the near future, as indicated by an 80% or greater chance that an individual is stressed or will soon will exhibit negative psychosocial symptoms. In an attempt to measure reliability, Scully, Tosi, and Banning (2000) conducted research into the SRRS after the scale had been in

existence for thirty years, and reported a Cronbach's alpha of 0.89. The population for this study consisted of graduate business and graduate nursing students ($n = 109$), business professionals ($n = 62$), and people that attended a stress seminar ($n = 17$).

Procedures

After securing IRB approval, all enrolled doctoral students within the educational leadership program received an email invitation from the researcher with support from the program director. The IRB approval letter was included (see Appendix B).

Additionally, a permission letter to use the BRS (Appendix C), the receipt for payment to use the MBI-SS (Appendix D), and the permission letter to use the SRRS (Appendix E) were included. Before the email was sent, students were notified about the study from the program group announcements. The announcements alerted students about program updates and upcoming dissertation defenses. The mention of a forthcoming email is anticipated to increase response rate in completion of the instruments. There was a total of 71 questions contained within the questionnaire. There were seven demographic questions, six were on the BRS, 15 were on the MBI-SS, and 43 questions were on the SRRS.

The questionnaire was hosted on Sam Houston State University's Qualtrics website. Having the data collected by a university-sponsored software program helped in providing students with reduced levels of anxiety regarding the confidentiality of their responses, because the researcher did not track IP addresses which allowed participants to remain anonymous. An online questionnaire provided students with the opportunity to opt-out of the survey. When students first accessed the questionnaire, they encountered a page that contained the informed consent form. Doctoral students were asked to read the

consent form and click “next” if they wished to participate. If they chose not to participate they could click an opt-out button.

Each assessment received a total score by summing responses according to the instrument’s individualized instructions. The first assessment, the BRS consisted of six questions on a 5-point rating scale (1 = strongly disagree; 5 = strongly agree). Questions one, three, and five are scored from 1 – “Strongly Disagree” to 5 “Strongly Agree.” Questions two, four, and six are reverse scored and are scored from 5 – “Strongly Disagree” to 1 “Strongly Agree.” The six different question point totals are summed and then divided by six to ascertain their average resilience score. In the second assessment, the MBI-SS, participants responded to 16 questions that specified “to what extent” they agreed with statements. Responses were based on a 7-point rating scale, ranging from “never” (0) to “always” (6). The subscale *Exhaustion*, is comprised of questions 1, 2, 3, 4, and 6; *Cynicism* subscale consists of questions 8, 9, 13, 14, and 15; finally, the *Professional Efficacy* subscale consists of the questions 5, 7, 10, 11, 12, and 16. Regardless of subscale, literature typically reports average scores (Schaufeli et al., 1996). To obtain average scores, various subscale questions are summed and divided by the number of questions. In the third assessment, the Social Readjustment Rating Scale, response options of ‘yes’ or ‘no’ were provided for each of 43 questions; only statements that were answered in the affirmative were summed. Scoring assignment varies per response option based on the level of common life stressors reportedly experienced. For example, the death of a significant other is worth 100 points but 30 points each are allotted for family reunions (student version) and for a large mortgage (original version).

Variables

The independent variable was identified as program phase of each student. The first-phase group included students who had not yet completed 18 hours of their doctoral program. The second-phase group contained students who had completed more than 18 hours but less than 36 hours of doctoral course work. Finally, the third-phase group was students who had completed more than 36 hours of doctoral course work but less than 54 hours. The dependent variables were the overall scores of each instrument: The Brief Resiliency Scale (BRS), Maslach Burnout Inventory-Student Survey (MBI-SS), and the Social Readjustment Rating Scale (SRRS). The demographic questionnaire variables were used to better describe the sample population being examined.

Data Analysis

The collected data helped the researcher to identify the extent of differences in the level of life stress, burnout, and resilience by program phase (first, second, and third) for doctoral students in an educational leadership preparation program. Descriptive and inferential statistical techniques were used to describe both the demographic data as well as the individual dependent variables of life stress, burnout, and resilience by program phase. Once all student responses were received, the author tabulated all instruments' scores using Microsoft Excel. In the dataset, each student received their own unique identification number to ensure confidentiality (e.g., 1, 2, 3). All responses received were coded and inputted into SPSS. Three ANOVAs were planned because the three dependent variables were intervally scaled (i.e., BRS, MBI-SS, and SRRS), and the grouping variable or independent variable (i.e., program phase) was categorical. The assumptions for an ANOVA were independence, normality, and homogeneity of variance

and because the assumption of normality was violated, the nonparametric Kruskal-Wallis test was utilized instead.

Three different nonparametric Kruskal-Wallis tests were used to analyze mean differences in stress, burnout, and resilience within K-12 Leadership and Higher Education Administration doctoral programs by program phase. Collectively, both the K-12 Leadership and the Higher Education Administration doctoral program data is divided into first, second, and third phases and used to assess variation in program stress, burnout, and resilience differences. A Kruskal-Wallis test was utilized because it is a test that helped researchers determine if there is a statically significant difference between the means of two (or more) independent groups. A Kruskal-Wallis test can indicate that at least two groups are statistically significantly different from another but cannot identify differences between the two specific groups (in cases where more than two groups are present) without posthoc tests. The Kruskal-Wallis test has four primary assumptions. The first assumption is the independent variables consist of two or more levels. The second assumption is that the dependent variables were scaled (i.e., interval, ordinal, or ratio). The third assumption for a Kruskal-Wallis test is that the observations are independent. The fourth assumption is that the groups should have similar shaped distributions. I utilized an alpha of .05.

Summary

This chapter presented the introduction, research questions, research design, selection of participants, instrumentation, procedures, variables, data analysis, and summary. Approximately 50 students were selected to participate in this cross-sectional, descriptive, and nonexperimental study that examines stress, burnout, and resilience for

doctoral students in a K-12 Leadership and Higher Education Administration program.

The students examined were in a cohort consisting of three different program phases (first, second, and third phases).

CHAPTER IV

Results

The purpose of this study was to determine the extent of differences among life stressors, burnout, and resilience for educational leadership doctoral students based on program phase. Descriptive and inferential statistical techniques were used to describe both demographic data and individual dependent variables of life stress, burnout, and resilience by program phase. Discussion of this study was divided into the following sections: (a) research questions, (b) data analysis procedures, (c) results, and (d) summary.

Research Questions

The following research questions were examined:

1. To what extent are there differences in the level of life stress by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
2. To what extent are there differences in the level of burnout by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?
3. To what extent are there differences in the level of resilience by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

Data Analysis Procedures

Descriptive statistics were run on variables in this study to check for assumptions of homogeneity in variance and normality. Boxplots were used to display descriptive

statistics: the median, the first and third quartiles, and the non-outlying minimum and maximum observations.

Results

Research Question 1. To what extent are there differences in the level of life stress by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

A one-way ANOVA was planned to analyze mean differences in life stress scores within K-12 Leadership and Higher Education Administration doctoral programs by program phase. Shown in Table 2 is the mean, median, standard deviation, skewness, and kurtosis for the level of life stress for doctoral students by program phase. Prior to conducting the one-way ANOVA, statistical assumptions of normality and homogeneity of variance were assessed. Normality was evaluated by examining the histograms, Q-Q plots, and the Shapiro-Wilk test. Homogeneity of variance was assessed through the Levene's test. The distribution was platykurtic and positively skewed for the first phase, the second phase was leptokurtic and positively skewed, and the third phase was mesokurtic and positively skewed. The Shapiro-Wilk test was not statistically significant for any phase ($p = .47, .91$); however, the distributions appeared to be markedly nonnormal. Levene's test was not statistically significant ($p = .24$), indicative that homogeneity of variance was met. Therefore, the nonparametric Kruskal-Wallis test was run. Results were not statistically significant ($p = .65$), indicating that doctoral students' total life stress scores could not be differentiated by the students' phase in the program. Researchers have noted that in the presence of an unbalanced design, imprecise estimates

of statistical and practical significance can result (Skidmore & Thompson, 2013).

Therefore, further elaboration of the results was provided descriptively.

Table 2

Descriptive Statistics for Total Life Stress Scores by Program Phase

Variable	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis
First Phase	15	153.13	131.00	109.39	0.53	-0.53
Second Phase	5	183.60	168.00	98.14	1.28	2.13
Third Phase	10	130.10	138.50	68.52	0.33	0.01

To add context to the scores the Social Readjustment Rating Scale scores of 150 points or less means a relatively low number of life change events and a low susceptibility to a stress-induced health breakdown. A score of 150 to 299 points implies about a 50% chance of a major health breakdown within the next two years. Finally, a score of 300 points or more raises the odds to about 80% chance of a major health breakdown within the next two years (Holmes & Rahe, 1967).

Examination of the boxplot (see Figure 1) showed that stressful life event scores varied across program phases in both measures of center and dispersion. The median stressful life events score of second phase doctoral students was the highest, followed by the third phase, and the first phase. Because distributions were somewhat skewed, the interquartile range was an appropriate measure of dispersion around the median scores. Second phase doctoral students had the widest spread of scores, with an interquartile range of 161. The first phase doctoral students had an interquartile range of 145. Third phase doctoral students had the tightest range of stressful life events scores with an

interquartile range of 107. Therefore, scores were less spread out about the median for third phase students, and most spread out about the median for students in the second phase.

In summary, second phase doctoral students had the highest median score, but they also had the most dispersed score. First phase students had the lowest median score, and were less dispersed than the second phase students. Third phase students had the second highest score with the least amount of dispersion.

When examining individual total life stress scores by program phase, the first doctoral phase sample group had 15 individuals and eight individuals or 53.33% of respondents within the first phase had a score that placed them in the low susceptibility to stress-induced health breakdown. Five individuals or 33.33% of the first phase respondents had a score that would indicate a 50% chance of a major health breakdown within the next two years. Two individuals or 13.33% had a score that indicates a 80% chance of a major health breakdown within the next two years.

The second phase doctoral sample group was comprised of five individuals, and of those, two students or 40% of respondents had a low susceptibility to stress-induced health breakdown. Two students or 40% had a score that indicated a 50% chance of a major health breakdown within the next two years, and finally there was one individual or 20% who had a score that indicated an 80% chance of a major health breakdown within the next two years.

The third doctoral phase sample group was comprised of 10 total respondents; six individuals or 60% had scores that indicated a low susceptibility to stress-induced health breakdown. Four individuals or 40% had a score that indicated a 50% chance of a major

health breakdown within the next two years, and there were no individuals with a score high enough to indicate an 80% chance of a major health breakdown within the next two years.

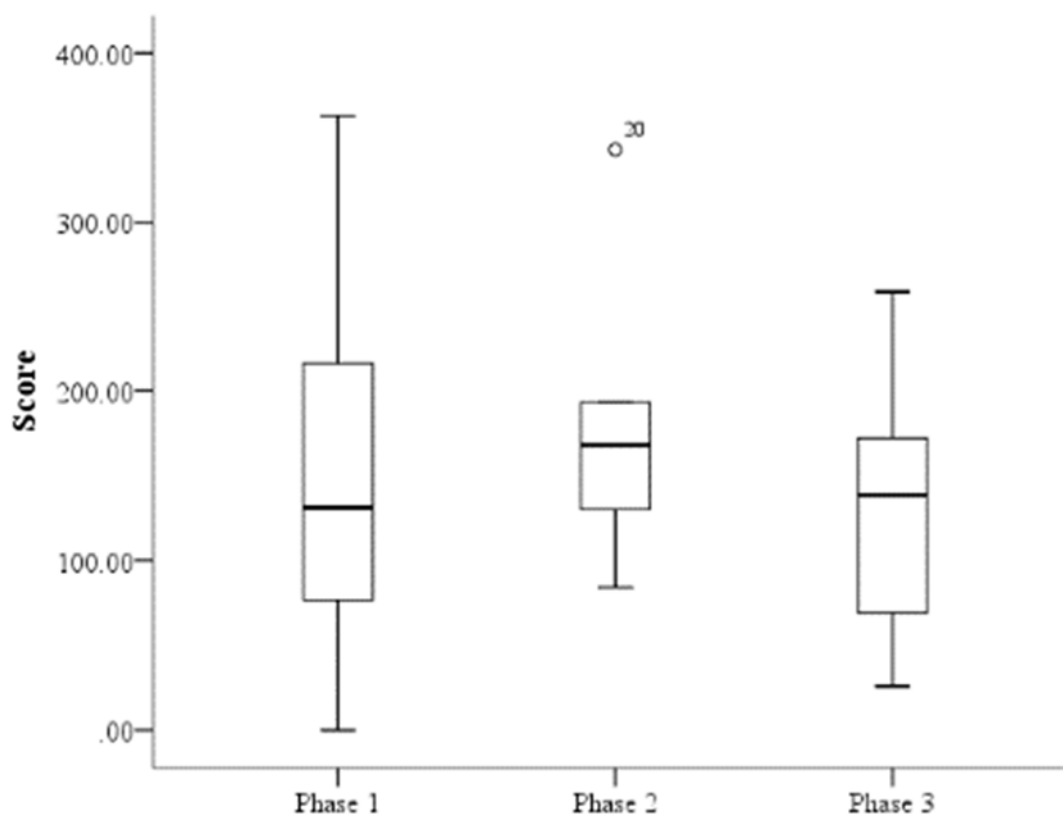


Figure 1. Box plot examining median total life stress scores by program phase.

In summary when examining median scores and dispersion, first phase doctoral students had a median score below 149, which indicates that at least half of the students had a low amount of life change and a low susceptibility to stress induced breakdown, but they also had the highest amount of dispersion. More than half of the second phase doctoral students had a total life stress score high enough to have a 50% chance of collectively suffering from a major health breakdown over the next two years, and they

also had the tightest range of dispersion. Third phase doctoral students had a median score below 149, which indicates that at least half of these students had a low amount of life change and a low susceptibility to stress induced breakdown. These students also had an intermediate amount of dispersion.

Research Question 2. To what extent are there differences in the level of burnout by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

A one-way ANOVA was planned to analyze mean differences on the three different subscales (exhaustion, cynicism, and professional efficacy) that comprise burnout scores within K-12 Leadership and Higher Education Administration doctoral programs by program phase. Shown in Table 3 is the mean, median, standard deviation, skewness, and kurtosis for the average level of exhaustion for doctoral students by program phase.

Prior to conducting the one-way ANOVA for exhaustion, statistical assumptions of normality and homogeneity of variance were assessed. Normality was evaluated by examining the histograms, Q-Q plots, and the Shapiro-Wilk test. Homogeneity of variance was assessed through the Levene's test. The distribution was mesokurtic and positively skewed for the first phase, platykurtic and negatively skewed for the second phase, and leptokurtic and positively skewed for the third phase. The Shapiro-Wilk test was statistically significant for the first phase ($p = 0.02$) and not statistically significant for the second and third phases ($p = .19, .32$); however, the distributions appeared to be markedly nonnormal. Levene's test was not statistically significant ($p = .41$), indicative that homogeneity of variance was met. Therefore, the nonparametric Kruskal-Wallis test

was run. Results were not statistically significant ($p = .79$), indicating that doctoral students' average exhaustion scores could not be differentiated by the students' phase in the program. Researchers have noted that in the presence of an unbalanced design, imprecise estimates of statistical and practical significance can result (Skidmore & Thompson, 2013). Therefore, further elaboration of the results was provided descriptively.

Table 3

Descriptive Statistics for Average Exhaustion Scores by Program Phase

Variable	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis
First Phase	15	1.91	1.40	1.30	1.05	-0.81
Second Phase	5	2.08	2.20	1.15	-0.15	-2.93
Third Phase	10	2.08	1.80	0.95	0.80	1.09

To add context to the average exhaustion scores, a score of 0 to 2.00 is low level of exhaustion. A score of 2.20 – 3.00 indicates a moderate amount of exhaustion. A score of 3.20 or higher indicates a high level of exhaustion (Maslach et al., 1996). Thus, the exhaustion subscale posits that individuals who score higher will have the highest likelihood of experiencing manifestations of being mentally and physically exhausted due to the demands of studying or school work.

Examination of the boxplot in Figure 2 showed that average exhaustion scores varied across program phases in both measures of center and dispersion. The median exhaustion score of second phase doctoral students was the highest, followed by the third phase, and the first phase. Because the distributions were somewhat skewed, the

interquartile range is an appropriate measure of dispersion around the median. Second phase doctoral students had the widest spread of scores, with an interquartile range of 2.30. The first phase doctoral students had an interquartile range of 1.80. Third phase doctoral students had the tightest range of exhaustion scores with an interquartile range of 1.00. Therefore, the scores were less spread out about the median for the third phase students, and most spread out about the median for students in the second phase.

When examining median scores, the second phase doctoral students were the only phase that had average exhaustion scores that were indicative of a moderate amount of exhaustion. The first and third phase doctoral students had median scores below 2.00. The first and third phase doctoral students had a low amount of exhaustion.

When examining individual average exhaustion scores by program phase, the first phase had 15 individuals; 10 individuals or 66.67% of respondents within the first phase had a low level of exhaustion. Two individuals or 13.33% of first phase respondents had a score that would indicate a moderate level of exhaustion. Three individuals or 20% had a high level of exhaustion.

Second phase doctoral students were comprised of five individuals; two or 40% of respondents had a low level of exhaustion. One or 20% had a moderate level of exhaustion. Finally, there were two individuals or 40% that had a score that indicated a high level of exhaustion.

The third phase of doctoral students was comprised of 10 total respondents; six individuals or 60% had scores that indicated a low level of exhaustion. Two individuals or 20% had a moderate level of exhaustion. Finally, two individuals (20%) had a high level of exhaustion.

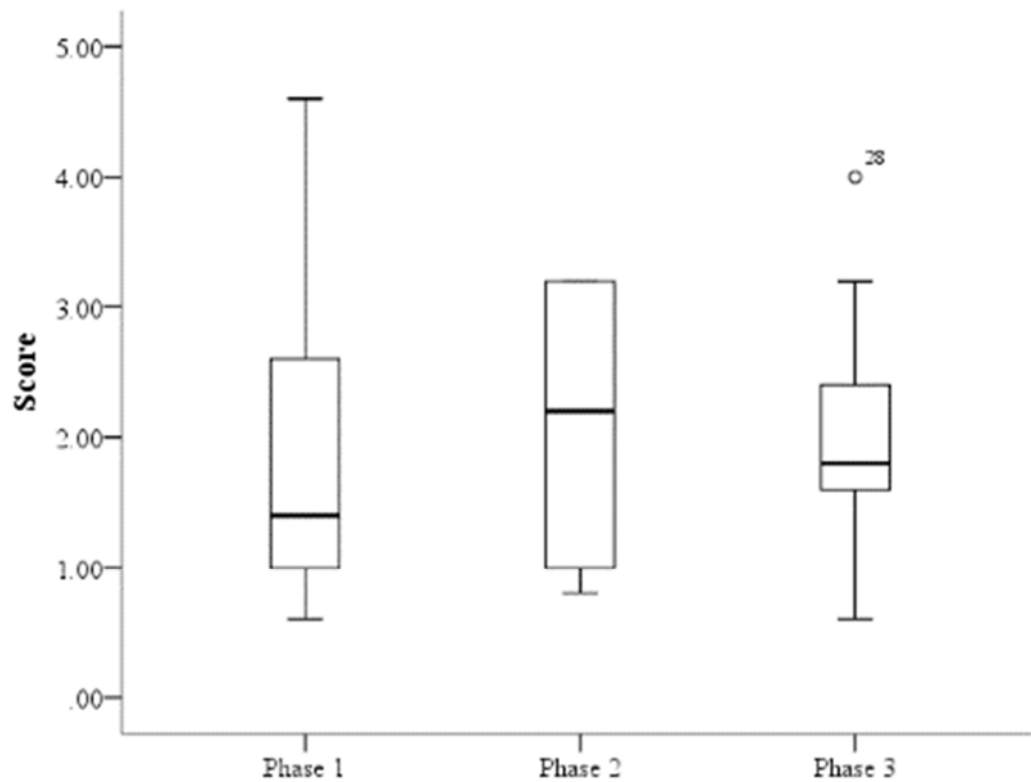


Figure 2. Box plot examining average exhaustion subscale scores by program phase.

In summary when examining median scores and dispersion, first phase doctoral students had a median score below 2.00, which indicates that at least half of them had a low amount of exhaustion and also had the middle amount of dispersion among the three phases. Second phase doctoral students had a median score of 2.20, which places at least half of them, in the moderate amount of exhaustion category, and they had the most amount of dispersion. Third phase doctoral students had a median score below 2.00, which indicates that at least half of them had a low amount of exhaustion and also had the lowest amount of dispersion among the three phases.

Prior to conducting the one-way ANOVA for cynicism, statistical assumptions of normality and homogeneity of variance were assessed. Normality was evaluated by examining the histograms, Q-Q plots, and the Shapiro-Wilk test. Homogeneity of variance was assessed through the Levene's test. The distribution was leptokurtic and positively skewed for the first and third phases, and platykurtic and positively skewed for the second phase. The Shapiro-Wilk test was statistically significant for the first phase ($p < .01$) and not statistically significant for the second ($p = .11$) and third phases ($p = .06$). Distributions appeared to be markedly nonnormal. Levene's test was not statistically significant ($p = .28$), indicative that homogeneity of variance was met. Therefore, the nonparametric Kruskal-Wallis test was run. Results were not statistically significant ($p = .31$), indicating that doctoral students' total cynicism scores could not be differentiated by the students' phase in the program. Researchers have noted that in the presence of an unbalanced design, imprecise estimates of statistical and practical significance can result (Skidmore & Thompson, 2013). Therefore, further elaboration of the results was provided descriptively. Table 4 contains the mean, median, standard deviation, skewness, and kurtosis for the average level of cynicism for doctoral students by program phase.

Table 4

Descriptive Statistics for Average Cynicism Scores by Program Phase

Variable	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis
First Phase	15	1.35	0.80	1.26	1.69	2.55
Second Phase	5	1.76	1	1.17	0.84	-1.82
Third Phase	10	0.92	0.80	0.87	1.62	3.47

To add context to average scores for the cynicism subscale, a score of 0.00 to 1.00 is low level of cynicism. A score of 1.20 – 2.00 indicated a moderate amount of cynicism. A score of 2.20 or higher indicates a high level of cynicism (Maslach, et al., 1996). Collectively, when examining median scores, all three phases of doctoral students, on average, possess a low level of cynicism. Thus, the cynicism subscale posits that individuals who scored higher on the cynicism subscale had the highest likelihood of being disinterested and apathetic about their academic program.

Examination of the boxplot in Figure 3 showed that exhaustion scores varied across program phases in both measures of center and dispersion. The median cynicism score of second phase doctoral students was highest. First and third phase students' median cynicism scores were identical to each other, and both sets of first and third phase scores were lower than second phase scores. Distributions were somewhat skewed, and the interquartile range is an appropriate measure of dispersion around the median. Second phase doctoral students had the widest spread of scores, with an interquartile range of 2.10. The first phase doctoral students had an interquartile range of 1.20. Third phase doctoral students had the tightest range of cynicism scores with an interquartile range of 1.05. Therefore, the scores were less spread out about the median for third phase students, and the most spread out about the median for students in the second phase.

When examining individual average cynicism scores by program phase, the first phase had 15 individuals; eight individuals or 53.33% of respondents within the first phase had a low level of cynicism. Five individuals or 33.33% of the first phase respondents had a score that would indicate a moderate level of cynicism. Two individuals or 13.33% had a had a high level of cynicism.

The second phase doctoral student sample group was comprised of five individuals, and of those, three or 60% of respondents had a low level of cynicism. Zero had a moderate level of cynicism. Finally, there were two individuals or 40% who had a score that indicated a high level of cynicism.

The third phase doctoral student sample group was comprised of 10 total respondents; of those, seven individuals or 70% had scores that indicated a low level of cynicism. Two individuals or 20% had a moderate level of cynicism. Finally, one individual or 10% had a high level of cynicism.

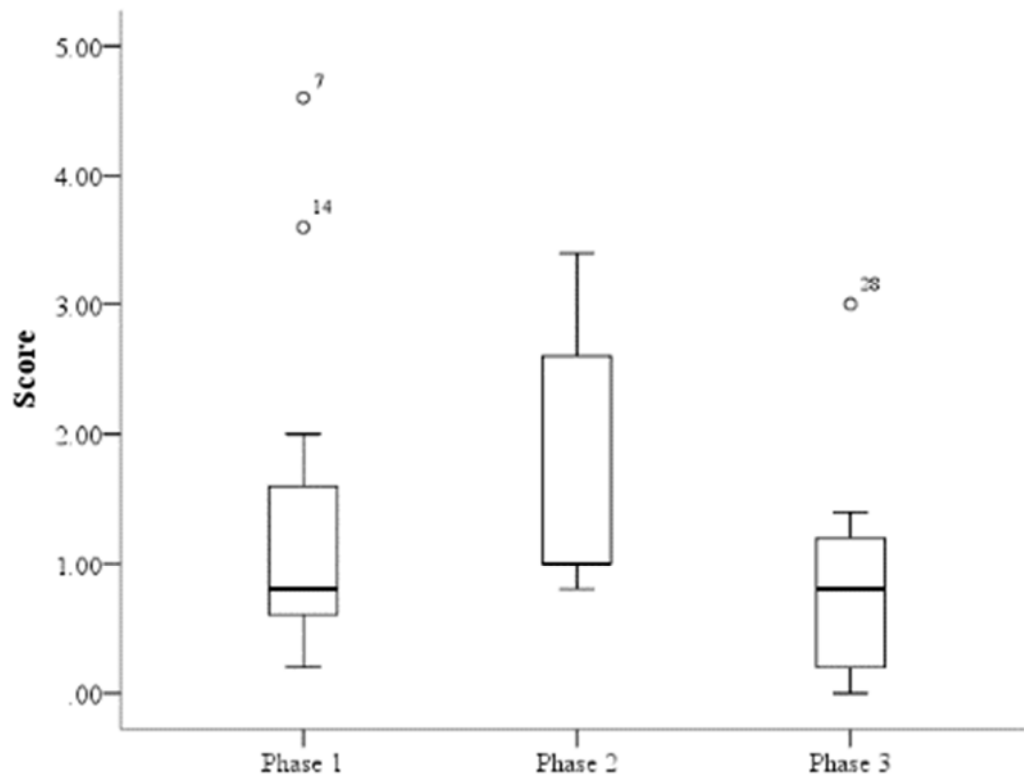


Figure 3. Box plot examining average cynicism subscale scores by program phase.

In summary, on average, scores for more than half of the doctoral students across all phases demonstrated a low level of cynicism, but within each phase there were

differences in the amounts of dispersion. Second phase doctoral students had the most dispersed scores. First phase students' scores were less dispersed than those for second phase students. Third phase students had the least amount of dispersion.

Prior to conducting the one-way ANOVA, statistical assumptions of normality and homogeneity of variance were assessed for professional efficacy. Normality was evaluated by examining the histograms, Q-Q plots, and the Shapiro-Wilk test. Homogeneity of variance was assessed through the Levene's test. The distribution was leptokurtic and negatively skewed for the first phase and platykurtic and negatively skewed for the second and third phases. The Shapiro-Wilk test was statistically significant for the second phase ($p = 0.04$) and not statistically significant for the first and third phases ($p = .69, .42$); however, the distributions appeared to be markedly nonnormal. Levene's test was not statistically significant ($p = .27$), indicative that homogeneity of variance was met. Therefore, the nonparametric Kruskal-Wallis test was run. Results were not statistically significant ($p = .06$), indicating that doctoral students' total professional efficacy scores could not be differentiated by the students' phase in the program. Researchers have noted that in the presence of an unbalanced design, imprecise estimates of statistical and practical significance can result (Skidmore & Thompson, 2013). Therefore, further elaboration of the results was provided descriptively. Table 5 displays the mean, median, standard deviation, skewness, and kurtosis for the average level of professional efficacy for doctoral students by program phase.

Table 5

Descriptive Statistics for Average Professional Efficacy Scores by Program Phase

Variable	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis
First Phase	15	4.37	4.16	1.00	-0.26	0.49
Second Phase	5	4.73	5.33	1.29	-0.50	-3.22
Third Phase	10	5.40	5.59	0.47	-0.75	-0.23

To add context to the average scores the professional efficacy subscale a score of 0.00 to 3.80 was low level of professional efficacy. A score of 4.00 – 5.80 indicates a moderate amount of professional efficacy. A score of 6.00 or higher indicates a high level of professional efficacy (Maslach, et al., 1996). Thus, the interpretation of the professional efficacy subscale is that individuals who scored higher on the subscale had positive feelings about their abilities to do the work.

Examination of the boxplot in Figure 4 showed that professional efficacy scores varied across program phases in both measures of center and dispersion. The median average professional efficacy score of third phase doctoral students was the highest, followed by second phase and then first phase. Because the distributions were somewhat skewed, the interquartile range is an appropriate measure of the dispersion around the median. Second phase doctoral students had the widest spread of scores, with an interquartile range of 2.50. The first phase doctoral students had an interquartile range of 1.17. Third phase doctoral students had the tightest range of professional efficacy scores with an interquartile range of 0.63. Therefore, the scores were less spread out about the median for the third phase students and the most spread out about the median for students in the second phase.

When examining individual average professional efficacy scores by program phase, the first phase had 15 individuals, and 3 individuals or 20% of respondents within the first phase had a low level of professional efficacy. Within first phase respondents 10 individuals or 66.67% had a score that indicated a moderate level of professional efficacy. Two individuals or 13.33% had a high level of professional efficacy.

Second phase doctoral student sample group was comprised of five individuals; of those, two or 40% of respondents have a low level of professional efficacy. One or 20% had a moderate level of professional efficacy. Finally, there were two individuals or 40% who had a score that indicated a high level of professional efficacy.

Finally, the third phase doctoral student sample group was comprised of 10 total respondents; of those, zero had a low level of professional efficacy. Eight individuals or 80% had a moderate level of professional efficacy. Finally, two individuals or 20% had a high level of professional efficacy.

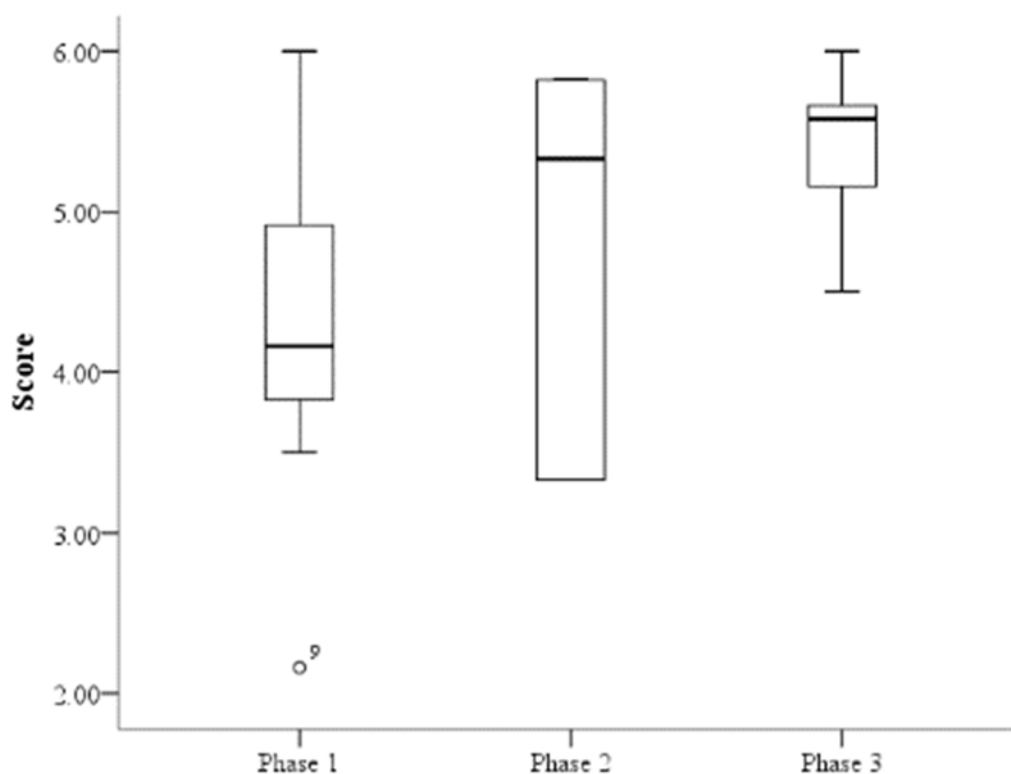


Figure 4. Box plot examining average professional efficacy subscale scores by program phase.

In summary, across all phases, at least half of the doctoral students demonstrated at least a moderate amount of average professional efficacy. When investigating dispersion, third phase doctoral student had the least dispersed score. Second phase students had the most dispersed scores, and first phase the middle amount of dispersion.

Research Question 3. To what extent are there differences in the level of resilience by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?

A one-way ANOVA was planned to analyze mean differences in resilience scores within K-12 Leadership and Higher Education Administration doctoral programs by program phase. Shown in Table 6 is the mean, median, standard deviation, skewness, and

kurtosis for the average level of resilience for doctoral students by program phase. Prior to conducting the one-way ANOVA, statistical assumptions of normality and homogeneity of variance were assessed. Normality was evaluated by examining the histograms, Q-Q plots, and the Shapiro-Wilk test. Homogeneity of variance was assessed through the Levene's test. The distribution was leptokurtic and negatively skewed for the first phase. The second and third phases were leptokurtic and positively skewed. The Shapiro-Wilk test was statistically significant for phase one ($p = .001$) and phase two ($p = .03$), but not statistically significant for phase three ($p = .30$). However, the distributions appeared to be markedly nonnormal. Levene's test was not statistically significant ($p = .67$), indicative that homogeneity of variance was met. The nonparametric Kruskal-Wallis test was run. Results were not statistically significant ($p = .67$), indicating that doctoral students' total resilience scores could not be differentiated by the students' phase in the program. Researchers have noted that in the presence of an unbalanced design, imprecise estimates of statistical and practical significance can result (Skidmore & Thompson, 2013). Therefore, further elaboration of the results was provided descriptively.

Table 6

Descriptive Statistics for Average Resilience Scores by Program Phase

Variable	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis
First Phase	15	3.91	4	0.59	-1.84	3.65
Second Phase	5	4.06	3.66	1.12	1.91	3.76
Third Phase	10	4.01	4	0.96	0.47	2.02

To add context to the scores the Brief Resilience Scale places scores, a score of 1.00 – 2.99 indicated a person with a low level of resilience, a person with a normal amount of resilience scored between 3.00 – 4.30, and a person with a high level of resilience had a score ranging from 4.31 – 5.00 (Smith et al., 2013). Thus, the interpretation of the BRS scores is that individuals who scored higher on the assessment have the propensity to bounce back from stressful life events.

Examination of the boxplot in Figure 5 showed that resilience scores varied across program phases in both measures of center and dispersion. The median resilience scores of first and third phase doctoral students were the highest, followed by second phase students. Distributions were somewhat skewed, and the interquartile range was an appropriate measure of the dispersion around the median. Second phase doctoral students had the widest spread of scores, with an interquartile range of 1.67. The third phase doctoral students had an interquartile range of 0.67. First phase doctoral students had the tightest range of resilience scores with an interquartile range of 0.16. Therefore, the scores were less spread out about the median for the first phase students and most spread out about the median for students in the second phase.

When examining individual average resilience scores by program phase, the first phase had 15 individuals; 2 individuals or 13.33% of respondents within the first phase had a low level of resilience. Eleven individuals or 73.33% of the first phase respondents had a score that would indicate a normal level of resilience. Two individuals or 13.33% had a high level of resilience. Second phase doctoral students were comprised of five individuals; of those, zero of the respondents had a low level of resilience. Four or 80% had a normal level of resilience, and there was one individual who had a score that

indicates a high level of resilience. Finally, the third phase doctoral students were comprised of 10 total respondents, of those, one or 10% had a low level of resilience, and seven individuals or 70% had a normal level of resilience, and finally, two individuals or 20% had a high level of resilience.

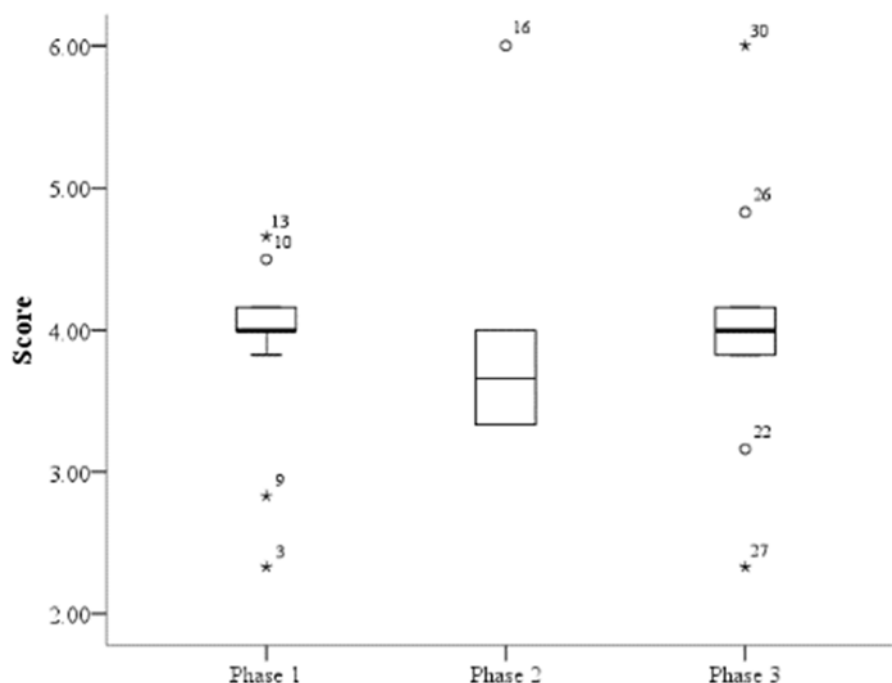


Figure 5. Box plot examining average resilience scores by program phase.

In summary, across all phases, at least half of all doctoral students had an average resilience score that was indicative of a normal amount of resilience. When looking at dispersion of scores, first phase students had the lowest dispersion among phases. Second phase students had the most dispersed scores, and third phase students had a intermediate amount of dispersion amongst the three phases.

Summary

The purpose of this cross-sectional, descriptive, and nonexperimental, quantitative study was to determine the extent of differences among life stressors, burnout, and resilience for educational leadership doctoral students based on program phase. Table 7 shows the results of the three measures based on program phase for life stress, burnout, and resilience.

Table 7

Life Stress, Burnout, and Resilience Results by Program Phase Based on Individual Responses

Instrument	Phase	Low		Medium		High	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Life Stress	First	8	53	5	33	2	13
	Second	2	40	2	40	1	20
	Third	6	60	4	40	0	0
Burnout	Exhaustion	10	67	2	13	3	20
		2	40	1	20	2	40
		6	60	2	20	2	20
	Cynicism	8	53	5	33	2	13
		3	60	0	0	2	40
		7	70	2	20	1	10
	Professional Efficacy	3	20	10	67	2	13
		2	40	1	20	2	40
		0	0	8	80	2	20
Resilience	First	2	13	11	73	2	13
	Second	0	0	4	80	1	20
	Third	1	10	7	70	2	20

Note. The highest percentage of life stress, burnout, and resilience scores are bolded and broken into first, second, and third phases and low, medium, and high placement within life stress, burnout, and resilience.

The majority of students had low levels of cynicism and a moderate amount of resilience, regardless of program phase. Excluding second phase students, a majority of students had low levels of life stress and exhaustion accompanied by a moderate amount of professional efficacy. As noted, second phase students stood apart, because they had polarized scores in both the exhaustion and professional efficacy subscales, in relation to the MBI-SS. The level of life stress for second phase students was distributed across low, medium, and high levels.

CHAPTER V

Discussion, Implications, and Recommendations

The purpose of this study was to determine the extent of differences among life stressors, burnout, and resilience for educational leadership doctoral students based on program phase. This study was intended to assist doctoral students who might be suffering from burnout and stress. Additionally, faculty and administrators could derive information concerning the program phase in the doctoral program when doctoral students typically experience an increased level of burnout. With information on occurrences of burnout during a doctoral program, faculty and administrators could develop an intervention program for doctoral students who might be at-risk of leaving the program. Findings from this study provide doctoral students' families, friends, and coworkers with information that could help in providing support. Moreover, this study provides administrators of educational leadership programs information about the most frequent strategies of resilience utilized by doctoral students. Knowledge concerning resilience may lead to an intervention program that will help future doctoral students. In this chapter, I summarized the results, connect the results to the theoretical framework, connect the results to the literature, describe the implications, and recommend possible avenues for additional research on this topic.

Summary of Results

Research Question 1 asked, "To what extent are there differences in the level of life stress by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program?" The results were not statistically significant according to the Kruskal-Wallis test, indicating that doctoral students' total life stress

scores could not be differentiated by the students' phase in the program. When examining median total life stress by program phase, first phase doctoral students had a median score below 149, which indicates that at least half of the students had a low amount of life change and a low susceptibility to stress induced breakdown. More than half of the second phase doctoral students had a total life stress score high enough to have a 50% chance of collectively suffering from a major health breakdown over the next two years. Third phase doctoral students had a median score below 149, which indicates that at least half of these students had a low amount of life change and a low susceptibility to stress induced breakdown.

Research Question 2 examined to what extent are there differences in the level of burnout by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program. The results were not statistically significant for exhaustion, cynicism, and professional efficacy indicating that doctoral students' average scores could not be differentiated by the students' phase in the program. When examining median average exhaustion scores, first phase doctoral students had a median score below 2.00, which indicates that at least half of them had a low amount of exhaustion. Second phase doctoral students had a median score of 2.20, which places at least half of them in the moderate amount of exhaustion category. Third phase doctoral students had a median score below 2.00, which indicates that at least half of them had a low amount of exhaustion. When examining median average scores for cynicism, at least half of the doctoral students across all phases demonstrated a low level of cynicism. When examining median average scores for the professional efficacy subscale across all

phases, at least half of the doctoral students demonstrated at least a moderate amount of professional efficacy.

Research Question 3 analyzed to what extent are there differences in the level of resilience by program phase (first, second, and third phases) for doctoral students in an educational leadership preparation program. The results were not statistically significant for resilience indicating that doctoral students' average scores could not be differentiated by the students' phase in the program. This finding means that at least half of all doctoral students had an average resilience score that was indicative of a normal amount of resilience.

Connection of Results to Theoretical Framework

The theoretical framework for this study was Conservation of Resources (COR; Hobfoll, 1998). The COR theory argues that students could suffer from life stress, experience burnout, and overcome stress and burnout with resilience (Hobfoll, 2011). This framework was selected because it helped conceptualize the phenomena under investigation: life stress, burnout, and resilience. The COR theory postulates that students could suffer from life stress in three different ways: (a) threatened loss of a resources such as self-esteem because of a poor grades on papers or tests (Alarcon et al., 2011), (b) actual loss of a resource such as time needed to work on papers or tests because of work or family obligations (Alarcon et al., 2011), and (c) incongruent resource investment and return on investment because scores on papers or tests do not reflect the energy invested. The results of my study indicated no statistically significant differences in the amounts of life stress by program phase. My results are incongruent with those originally postulated by Hobfoll and Freedy (1993) in the COR theory.

The COR theory argues that students could suffer from burnout if they experience a loss of resources over a prolonged period of time (Hobfoll & Freedy, 1993). Resources that a student could lose are health, time, and self-esteem (Alarcon et al., 2011). Students experiencing burnout may magnify their losses of resources by exemplifying poor coping strategies (Fares et al., 2016). According to the COR theory, each additional phase of doctoral education might have led to higher levels of burnout for some students who experienced loss. Doctoral program assignment completion can be time consuming for some students. This loss of time accumulates as students progress through their doctoral program. According to COR theory, some third phase students could have higher scores on the burnout inventory because they might have experienced a continual loss of time. The results of my study indicated no statistically significant differences in the amounts of burnout by program phase. Results in the present study with one doctoral program were not supported by the COR theory.

Resilience and COR theory state that students who have a higher level of resilience utilize positive coping mechanisms to create an abundance of resources. This abundance of resources can result in healthy coping strategies that lower levels of stress and burnout. Although students in this study might have used resilience strategies, the findings did not indicate a difference in the levels of resilience based on program phase.

Connection of Results to Existing Literature

My research investigation indicated that students' levels of life stress, burnout, and resilience were not statistically significantly different based on the phase (first, second, third) of their doctoral program. No other researcher was found who examined these variables (life stress, burnout, and resilience) in a single study. The connections of

my research to the existing literature are discussed in the following sections of life stress, burnout, and resilience.

Life Stress. Research conducted by Smyth et al. (2008) found that 66% of 6,053 undergraduate students at multiple universities throughout the country have experienced at least one stressful life event over the past year. Although smaller in scope and in one geographic location, my results indicated that 100% of doctoral students have experienced at least one stressful life event over the past year. It could be inferred that age has a role in determining the frequency of experiencing stressful life events. In relation to the Smyth et al. (2008) study, it can be inferred that the average age of doctoral students are greater than that of undergraduate students. Because many life events on the Social Readjustment Rating Scale are more likely to be experienced by an older individual (e.g., marriage/divorce, mortgage), my results are not surprising. As supported by Lin and Huang's (2013) study, older people experience more life stress than younger people. In their study they noted that upperclassmen in undergraduate programs were more likely to have experienced a greater amount of life stress. Haynes et al. (2012) argued the reason doctoral students, and in particular female students report increased levels of stress is due to the fact that they are adding the role of student to preexisting adult responsibilities. Some of the multiple roles that a doctoral student experience may include: student, employee, parent, spouse, researcher, friend, sibling (Haynes et al., 2012). Smith et al. (2006) believed that the interplay between these roles and a lack of resources (e.g., time and energy) can lead to physical and psychological symptoms of stress. Stratton et al. (2006) continued the sentiment and argued the time required to be a graduate student detracts from the time a student would spend with family, exercising,

and spiritual matters, causes stress. Social support is a critical component of doctoral student alleviation of stress (Johnson et al., 2008). Social support can include professors, family, significant others, peers, and friends (Castro, 2011; Stratton et al., 2006). Universities with faculty who mentored doctoral students were apt to have students who had reduced amounts of stress and lower levels of students dropping out (Goplerud, 1980).

Burnout. Unlike the study by Lin and Huang (2013) who found that upper classmen in undergraduate programs were more likely to experience burnout, Chang, Eddins-Folensbee, and Coverdale (2012) investigated burnout among medical students in a doctoral program. Chang et al. (2012) indicated statistically significant levels of burnout were independent of program phase. Likewise, in the current study, there were no statistically significant differences in the level of burnout based on program phase of educational leadership students' doctoral education. According to researchers (e.g., Chang et al., 2012; Lushington & Luscri, 2001), social support is a critical component of reducing or eliminating burnout, so it might be inferred that doctoral students had more established support networks. Multiple researchers have argued that students who believe that faculty were supportive of them had lower rates of burnout (Clark et al., 2009; Gelso & Lent, 2000; Hunter & Devine, 2016; Ross et al., 1989; Russell et al., 1987). It is possible that students in this program experienced supportive faculty; this factor might have been related to the lower levels of burnout observed in this study. Although mentorship was not a focus of the current study, further study in the area of faculty mentorship and doctoral student burnout might be warranted. Cornér, Löfström, and Pyhältö (2017) investigated doctoral student burnout; their research indicated that

students with the highest amount of burnout had low satisfaction with faculty interactions and infrequent interactions with faculty outside of the classroom. Hermann, Wichmann-Hansen, and Jensen (2014) stated that doctoral students who did not receive adequate support that enabled them to overcome the challenges presented in doctoral education were likely to have increased levels of burnout.

Resilience. Within the current study, all students were resilient according to the Brief Resilience Scale scoring rubric. Multiple researchers (e.g., Hassinger & Plourde, 2005; Nelson et al., 2009; Patton & Harper, 2003; Protivnak & Foss, 2009; Shavers & Moore, 2014; Zalaquett & Faliciano, 2004) believed that mentorship inside and outside of academia played a crucial role in doctoral students' likelihood of graduating. Other researchers had argued that having support inside and outside of the classroom was paramount to doctoral students' matriculating (Ceballo, 2004; Gardner & Holley, 2011; Hoskins & Goldberg, 2005; Lewis et al., 2004; Thomsen, 2002). Hoskins and Goldberg (2005) provided evidence that strong relationships with faculty and peers within academia was a critical component for building and maintaining resilience. Although not examined in the current study, mentor programs or supportive relationships might have contributed to resilience in the sample population. Resilience could have been learned (Bernard, 1997; Thomsen, 2002) and resilient students had an increased level of intrinsic motivation, which can consist of doing activities for enjoyment, challenge, and self-interest (Brehm et al., 2005). Also, research indicates that resilient students have a clear goal regarding their studies (Castro, et al., 2011). It could be argued that doctoral students have a clear and defined goal for their enrollment in a doctoral program.

Implications for Practice

In the current study, there were not statistically significant differences in levels of life stress, burnout, and resilience based on program phase; however, results indicated that all students encountered life stressors. Multiple researchers (e.g., Anthony, 1974; Garnezy, 1971, 1974; Garnezy & Streitman, 1974; Masten, Best, & Garnezy, 1990; Murphy, 1974; Murphy & Moriarty, 1976; Rutter, 1979; Werner & Smith, 1982) have argued that students, especially at the master's or doctoral levels, could benefit from intervention strategies. Smyth et al. (2008) believed that programs should administer a self-screening stress questionnaire at the start of each semester. Implications of the current study would suggest the benefit of having faculty advisors identify students experiencing life stressors and connect them with support programs (Anders et al., 2012; Lin & Huang, 2013; Mallinckrodt & Leong, 1992; Pavalakis & Kaitelidou, 2012).

Additional inferences derived from this study suggest that when 100% of doctoral students in this study reported experiencing life stress, faculty should be cognizant of the potential negative effects that stress might have on their students and be aware of resources. Researchers have concluded that faculty who take a role in helping students address life stress, burnout, and resilience might help students matriculate. For example, Gelso and Lent (2000) suggested faculty should receive training on how to support their students, which is similar to Clark et al. (2009) who believed faculty might have the greatest influence on doctoral students completing their degree.

Recommendations for Future Research

Because no literature was located on the differences of life stress, burnout, and resilience, the recommendations for future research are numerous. Although this study

revealed no statistically significant differences in the levels of life stress, burnout, and resilience among doctoral students by program phase, other variables might influence a doctoral student's levels of stress, burnout, and resilience.

This study could be expanded to review other doctoral programs and professional degrees (e.g., engineering, business, liberal arts, mental health, medicine) by program phase based on levels of life stress, burnout, and resilience. Much of the literature that investigates life stress, burnout, and resilience is focused on mental health and medical students, but no current studies were found that investigated the differences of all three measures (i.e., life stress, burnout, resilience) within the same study.

This study gathered demographic information; however, it was not the aim in this research to understand how these differences were related to life stress, burnout, and program phase. The demographic information that was collected might provide insight into differences in gender and ethnicity as it relates to students' levels of life stress, burnout, and resilience by program phase. When investigating stress (Backovic et al., 2012; Jagaratnam & Buchanan, 2004), researchers noted that females had higher levels of stress. Lewis et al. (2004) investigated African-American females and concluded that resilience was a major contributing factor to their matriculating through the program. By including gender and ethnicity, information about life stress, burnout, and resilience can be expanded.

Another avenue for researchers to pursue would be to conduct a longitudinal study among the same group of students across program phase. This longitudinal study would identify differences in the levels of life stress, burnout, and resilience based on program phase (Mirzaei et al., 2012). In the current study, data were collected at one

point in time. There might be differences among students when they are asked at multiple points during their doctoral education program.

Alternatively, qualitative research could be used to investigate the variables of life stress, burnout, and resilience. Researchers could interview students who left their doctoral program to determine the extent to which life stress or burnout influenced their decision to leave the program. In conducting these studies, a list of common factors might be shared to help administrators and faculty anticipate students who might be more likely to suffer from life stress or burnout.

Another suggestion for further research would be to investigate other assessments that measure life stress, burnout, and resilience such as the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983), the Copenhagen Burnout Inventory (Kristensen et al., 2005), and the Connor-Davidson Resilience Scale (Connor & Davidson, 2003). These different assessments could have been used and different results might have been observed within the same group of students based on program phase. These different assessments could be applied to suggestions for future research.

Future researchers could incentivize participants by sharing results after the measurements were taken. This step might have mitigated the social desirability. For example, if students learned the results of these measures while answering the questions, they could learn about their levels of life stress, burnout, and resilience. It is possible they might have answered the questions more truthfully.

Another possible suggestion for future research would have been to have students take a paper and pencil version of the measures. If students were allowed class time to complete the measures, their response rates might have been higher. With a response rate

closer to 100%, students who might have scored lower in these measures might have participated. In addition, the study might have included students who did not check their university email account.

Another possible idea for future research would be to include students who have completed academic coursework and are working on their dissertations. This study did not include that group of students. Gravois (2007) reported that 50% of doctoral students complete their coursework but do not complete the degree, thus, this group of students might have higher levels of life stress and burnout and lower levels of resilience. Additional interventions could be planned to assist these students with the negative effects of life stress and burnout.

Summary

In this chapter, the results from this study were summarized as they are related to the three research questions. Connections were drawn to the theoretical framework. Comparisons were made between the results of this study and the literature reviewed in Chapter II. Finally, implications and directions for future research were discussed.

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APPENDIX A

Required Demographic Questionnaire

1. In which specialization are you enrolled?
 - ☐ Higher Ed
 - ☐ K-12
2. Which cohort are you a member of?
 - ☐ 38
 - ☐ 37
 - ☐ 36
 - ☐ 35
 - ☐ 34
 - ☐ 33
 - ☐ 32
 - ☐ 31
 - ☐ 30
 - ☐ 29

Optional Demographic Questionnaire

1. Which gender do you self-identify with?
 - ☐ Man
 - ☐ Woman
 - ☐ Other
2. Which ethnic/racial category do you self-identify with?
 - ☐ American Indian or Alaska Native
 - ☐ Asian
 - ☐ Black or African American
 - ☐ Hispanic, Latino, or Spanish origin
 - ☐ Middle Eastern or North African
 - ☐ Native Hawaiian or other Pacific Islander
 - ☐ White
 - ☐ Other: _____
3. What is your job title?
 - ☐ _____

APPENDIX B

IRB Application (Thesis/Dissertation)

[Available Forms IRB Application \(Thesis/Dissertation\)](#)

Contact Information

Sam Houston State University
Office of Research and Sponsored Programs
Huntsville, TX 77341-2448
(936) 294-4875
sharla_miles@shsu.edu

Please Note:

You may choose to complete a [shorter form](#) should the research meet the exemption requirements detailed in [45CFR46.101\(b\)](#).

Within an application you may use the "Generate PDF" option to the right side of the window to create a PDF of the application in its current state.

- [Your Forms](#)

[New IRB Application \(Thesis/Dissertation\)](#)

Instance	Started	Status	Updated	Waiting On
IRB Application (Thesis/Dissertation) #35649	Approved	Nov 7, 2017 6:46:48 AM	Jul 16, 2017 8:02:53 AM	

APPENDIX C

Mitchell Parker

From: Bruce Smith <[REDACTED]>
Sent: Wednesday, March 9, 2016 1:42 PM
To: Mitchell Parker
Subject: Re: The Brief Resilience Scale
Attachments: Brief Resilience Scale Questionnaire English Version.pdf; BW Smith Brief Resilience Scale Cutoffs on Page 177.pdf; BW Smith Brief Resilience Scale Predicts Outcomes.pdf; BW Smith Brief Resilience Scale Validation Article.pdf

Hi Mitchell,

Thanks for your interest in the Brief Resilience Scale. You are welcome to use it free of charge and for as much as you like. I have attached the original validation article, a copy of the scale as it usually appears in questionnaires, a chapter with suggested cut-offs for high and low resilience which also has data on predictors of resilience, and an article on the relationship between the BRS and various outcomes. Please let me know what you find when you can. I wish you the best in your research.

Kind Regards,

Bruce

On Mon, Mar 7, 2016 at 11:42 AM, Mitchell Parker <[REDACTED]> wrote:

Good afternoon Dr. Smith,

I am sending this email to inquire if I can have permission to use the Brief Resilience Scale for my dissertation?

Cheers,

Mitch Parker, M.S.

Director of Career and Employment Services

Amarillo College

Phone: [REDACTED]

Fax: [REDACTED]

Email: [REDACTED]

APPENDIX D

Mitchell Parker

From: Mind Garden <info@mindgarden.com>
Sent: Saturday, August 5, 2017 9:51 AM
To: Mitchell Parker
Subject: [Mind Garden] Order #14164 Complete



Hi, Mitch Parker

Thank you for shopping with Mind Garden!

ORDER DETAILS - PAYMENT COMPLETE

Order: UDGNRQINP
Completed on: 08/05/2017 07:50:59
Payment: PayPal USA, Canada

Product	Unit price	Quantity	Total price
Maslach Burnout Inventory - Remote Online Survey License - Translation : English (default)	\$2.50	66	\$165.00
		Shipping	\$0.00
		Total Tax	\$0.00
		Total	\$165.00

APPENDIX E

Mitchell Parker

From: Mitch Parker [REDACTED]
Sent: Wednesday, July 12, 2017 8:16 AM
To: Mitchell Parker
Subject: Fwd: Thank you for your order with RightsLink / Elsevier

**Thank you for your order!**

Dear Mitch Parker,

Thank you for placing your order through Copyright Clearance Center's RightsLink® service.

Order Summary

Licensee:	Mitch L Parker
Order Date:	Jul 12, 2017
Order Number:	[REDACTED]
Publication:	Journal of Psychosomatic Research
Title:	The social readjustment rating scale
Type of Use:	reuse in a thesis/dissertation
Order Total:	0.00 USD

View or print complete [details](#) of your order and the publisher's terms and conditions.

Sincerely,

Copyright Clearance Center

VITA

Mitchell Parker

EDUCATION

Ed.D. Higher Educational Leadership

Sam Houston State University, Huntsville TX

Dissertation: An Examination of the Differences in Doctoral Students' levels of Life Stress, Burnout, and Resilience by Program Phase

M.S. Community Counseling

Henderson State University, Arkadelphia AR

B.A. Psychology

Henderson State University, Arkadelphia AR

EXPERIENCE

Director of Career Services

Amarillo College, Amarillo TX

Marketing and Events Coordinator – Career Services

Sam Houston State University, Huntsville, TX

Owner/Operator,

Dallas Guide Fishing, Corsicana, TX

Assistant Director – Career Services

Texas A&M University – Kingsville, TX

Career & Personal Counselor

University of Arkansas – Little Rock, AR

PUBLICATIONS

Book Chapter

Parker, M. The great outdoors? In R.M. Bustamante (Ed.). *A collection of cases in higher education leadership*. Dubuque, Iowa: Kendall-Hunt.

Journals

Jordan, J., **Parker, M.**, Li, X., & Onwuegbuzie, A. (2015). Effect of study skills program participation on undergraduate student academic performance. *International Journal of Education*, 7(1), 247-265. doi:10.5296/ije.v7i1.6888

PRESENTATIONS & WORKSHOPS

Presentations

Jordan, J., **Parker, M.**, Li, X., Scott, S., & Bullion, A. (2014, February). *Impact of a study skills program participation on student academic performance*. Paper presented at the meeting of the Southwest Educational Research Association, New Orleans, LA.

Jordan, J., Wilcox, R., Paitson, D., & **Parker, M.** (2015, February). *The role of doctoral studies on the relationships between select doctoral students and their partners: A collective case study*. Paper presented at the meeting of the Southwest Educational Research Association, San Antonio, TX.

Workshop

Parker, M., Wilcox, R., Gonzalez, V., Jordan, J., Lebron, J., Paitson, D., Valle, R., Skidmore, S. T., & Combs, J. P. (2015, February). *Secondary data analysis: Lessons learned in a doctoral level statistics course*. Workshop presented at the meeting of the Southwest Educational Research Association, San Antonio, TX.

AWARDS & HONORS

Dean's Award – Awarded for outstanding paper (SERA, 2015)

Jordan, J., Wilcox, R., Paitson, D., & **Parker, M.** (2015, February). *The role of doctoral studies on the relationships between select doctoral students and their partners: A collective case study*. Paper presented at the meeting of the Southwest Educational Research Association, San Antonio, TX.

PROFESSIONAL ORGANIZATIONS

National Association of College and Employers (NACE)

National Career Development Association (NCDA)

Southern Association of Colleges and Employers (SoACE)

Texas Association of College & University Student Personnel Administrators (TACUSPA)